



THE RIVER CLICK REINFORCEMENT WORKS' WORK SAFETY SYSTEM

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Abstract

Although K3 has been implemented in all government projects and is mentioned in the technical requirements for each task, work accidents do still occur on construction sites. The adoption of an occupational safety and health management system in a work creation project must be maximized by incorporating various levels of management in order to develop and maintain a safer, more effective, and productive work environment. Implementing riverbank reinforcement, not using safety equipment, being ignorant about workplace safety, and not having access to work safety equipment are all factors that lead to accidents. In addition to talking about work safety, the researchers also covered how to use the proper task safety approach in projects including riverbank reinforcement. Primary data for the study were gathered through questionnaires given to a sample of informants and interviews with the director of the office for public works and spatial planning at the Balangan Regency's water resources division. SPSS version 26.00 was used to analyze the data (Statistics, product and service solutions). The customer technique employed the Satisfaction Index to gauge participant satisfaction levels (CSI). To identify the necessary service variables, enhanced technique important performance analysis (IPA) is now applied. Profession Reinforcement Rock by River participant satisfaction level 72.67%. It is therefore possible to draw the conclusion that perception or performance in the present. (Caljouw et al., 2009) the risks of performance socialization in the firm K3; (Octavianti & Charles, 2019) the procedure for declaring an emergency inside the firm; (Sunarharum et al., 2014) identifying the root cause, looking into the issue, and taking steps to prevent future OHS concerns; Not yet satisfied in order for the party management to provide adequate power to the source for each of these different parameters in order to make use of the performance boost.

Keywords: satisfaction, performance, and expectations; CSI; science; safety job.

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1. Preambular

According to the providers' experience, work accidents are frequently discovered but not reported. Hence, in this study, we will address the impression of the K3 work safety system on riverbank reinforcement work with a value below Rp. 200,000,000.00 using the Direct Appointment method. Incomplete use of safety equipment, remote project locations, disturbances from the community, such as protests from landowners affected by the work project, and finally, a lack of attention from each party because the work is only worth less than Rp 200,000,000.00, making it seem easy and trivial, all contribute to work accidents. Existence review bulk rain and vest buoy safety work should be mandated in System Safety work. Regency Balangan frequently discovered overflowing rivers in the region as a result of rain from downstream rivers to upstream rivers. Special care is required for the job of cliff river reinforcement, and not every employee is able to swim.

2. Literature survey

2.1 Work Definition of Health and Safety

The word "safety," which is where the term "safety work" originates, is typically associated with a condition that is free from accidents or almost disastrous incidents (near -miss). Study the elements that might lead to an accident happening and try to come up with different strategies and tactics for reducing the likelihood of accidents occurring. This is essentially safety as it relates to science and practice (Ward & Marfai, 2013). Researchers' definition of health and safety work is as follows:

1. Safety and health work is something thinking and effort for ensuring completeness and perfection excellent physical nor spiritual power work on, and people on generally, outcome works and culture for going to public just and prosperous, according to Mangkunegara (2002).
2. According to (Máximo et al., 2016), safety is focused on safeguarding a person's physical wellbeing from accidents connected to their line of work. General physical, mental, and emotional stability will be a condition of health.
3. (Unlu et al., 2010), "Safety" work is conditioning risk-free safety where we operate, including concerning condition buildings, condition machines, equipment safety, and conditions personnel.
4. The Large Indonesian Dictionary defines safety and health job as "a condition work free from threats disturbing hazard process activity and result in injury, sickness, damage valuable items, as well as disrupt environment".

2.3. Construction K3 Occupational Regulation

There are a number of settings for K3 that are general and also specific for maintenance construction that must be used in order to employ assured safety and health work, some of which include:

1. The first is Law No. 2 of 2017 on Service Construction.
2. Government Regulation No. 50 of 2012 About SMK3 Application
3. The 2019 President's Order No. 07 on Disease Consequence Work
4. The Government Regulation No. 88 of 2019 on Occupational Health
5. Permenakertrans RI No. 1 of 1980 with regards to Building Site Safety Work.
6. Republic of Indonesian Ministry of Manpower Decree No. Kep-196/Men/1999 on Guarantee Program Administration Social Power Work for Power Work Daily Freelance, Wholesale, and Agreement Work Time Certain in the Construction of the Service Sector.
7. Republic of Indonesia Decree No. 384/KPTS/M/2004 Concerning Technical Guidelines for Safety and Health Work on Dam Building Site.
8. Minister Employment Regulation No. 5 of 2018 Relating to Workplace Safety and Health
9. The 2008 PU Ministerial Order No. 9 on the SMK3 Guidelines
10. PU Ministerial Order No. 5 of 2014 on Field Profession General Construction SMK3 Guidelines
11. PERMANENT PUPR 02/PRT/M/2018 Year. Safety Management Component (Management safety) OHSAS (Occupational Health and Safety Assessment Series) 18000 is one system management safety and health work that has been created and used as a reference. OHSAS 18000, or system management, safety, and health, contains OHSAS 18001. (OHSMS- Occupational Health and Safety Management Systems). OHSAS characteristics and requirements offer requirements for system management of health and safety (OH&S- Occupational Health & Safety). The OHSAS Specification is applicable to all organizations and can be implemented in a variety of ways depending on organizational OH&S policy elements, the nature of the activity, repercussions, and degree of complexity.

2.4. River Reinforcement Cliff Profession

In order to prevent erosion and runoff wave (overtopping) to land, reinforcement slopes and revetments are structures that are erected on cliff rivers to absorb water energy. Improve the embankment that protects a river or body of water. In addition to being utilised to defend river slopes, reinforcement cliffs are frequently employed to safeguard embankments. Building in a protected region is directly behind a cliff that serves as

reinforcement. Buildings on the seashore that are facing the wave may be slanted or vertical. This structure may be formed of a few Gabions, a few stones, concrete, a bundle of pipes (buis), plaster, wood, or a variety of factory-produced Typerevertments. Yet what is frequently seen in the field is a cliff that has been reinforced with stone piles, with the outer layer made up of larger stones.

2.5. Validity Exam

Test validity is accomplished using the Pearson Product Moment technique of correlating individual questionnaire item scores with the overall result. If the mark coefficient is more than 0.3, the item question can be deemed genuine. About the current Pearson product formula, specifically:

$$r = \frac{N \sum XY - (\sum x)(\sum y)}{\sqrt{(N \sum X^2 - (\sum X)^2)(N \sum Y^2 - (\sum Y)^2)}}$$

Table 1: Interpretation Coefficient Correlation Giving Instructions

Coefficient Interval	Relationship Level
0 r > 0.2	Very weak
0.2 r > 0.4	Weak
0.4 r > 0.6	Currently
0.6 r > 0.8	Strong
0.8 r > 1	Very strong

2.6 Test of Reliability

Reliability tests are used to determine how much a questionnaire can be trusted or relied upon if it is used more than once at various times and results in measurements that are essentially the same. In other words, reliability tests demonstrate that a questionnaire can be relied upon. Formula for calculating test reliability:

$$\alpha = \left(\frac{r}{n-1}\right) \left(1 - \frac{\sum \sigma^2}{\sigma^2}\right)$$

where N represents the overall sample size, R represents the average correlation index, item sum variance, and overall composite variance. SPSS software will be used to process the reliability test results for this study.

2.7 CSI (Customer Satisfaction Index)

According to (Van Minh et al., 2014), the customers satisfaction index is used to measure how satisfied customers are with a service provider's thoroughness, degree of performance, and rate of interest. The following actions are taken to utilize the CSI value:

1. Establish the Mean Importance Score (MIS) and Mean Satisfaction Score (MSS) The average of a mark's importance for an attribute is called the mean importance score (MIS). Whereas mean Satisfaction Score (MSS) is the average

where Y is the overall score for X, X is the total score for each question or item, and N represents the total number of respondents. R can have values ranging from -1 to +1. This can be mathematically represented as -1 r +1. Three options are provided by the calculation:

1. If the correlation between the two variables is zero or near to zero, then there is no link between the variables X and Y.
2. If r is equal to or nearly equal to 1, the association between the two variables is strong and unidirectional and is referred to as positive.
3. If r is equal to or nearly equal to one, the link between the two variables is said to be negative and strong in the opposite direction.

Be led by the provision as shown in Table 1 as ingredients interpretation to coefficient connection is discovered to be large or little.

measurement of level satisfaction based on how the customer perceives the performance of the service.

$$MIS = \frac{\sum_{i=1}^n X_i}{n}$$

where X_i is the interest score characteristic from X to -i, and n is the total number of respondents.

2. Establish the weighted factor, also known as the weight factor. This weight is the proportion of each indicator's MIS score to the overall MIS of all indicators.

$$WF = \frac{MIS_i}{\sum_{i=1}^p MIS_i} \times 100 \%$$

Where, MISSION: Average score of importance to -i: $\sum_{i=1}^p M_i S_i$ The average number of interests from -i to -p.

Location, Mission: Average importance score for -i: $\sum_{i=1}^p M_i S_i$ the typical number of interests between -i and -p.

3. Find the weighted score (WS) or mark. This weight is calculated by multiplying the WF by the overall degree of satisfaction.

$$WS_i = WF_i X$$

$$MSS \dots \dots \dots (2.6)$$

According to (Utarini & Schmidt-Ehry, 2009), to get the overall CSI, the average value in the column interests (I) is added up to get Y, and the product of I and P in the column scores (S) is added up to get T.

Table 2: Degree of Satisfaction Criteria

No	CSI Value (%)	Description (CSI)
1	81% CSI > 100 %	Very Satisfied
2	66% CSI > 81 %	Satisfied
3	51% CSI > 66%	Enough Satisfied
4	35% CSI > 51 %	Not Satisfied
5	0 % CSI >35 %	No Satisfied

Using the parameters from Table II, 100% is the maximum CSI. Further CSI values below 50% imply that the performance wasn't sufficiently satisfactory. Nowadays, CSI values of 80% or more indicate extremely happy customers with service performance.

2.8. IPA (Importance Performance analysis)

This approach assesses the degree of consumer interest (customer expectations) in connection to what the organization should do to develop a product or provide great service (Organization, 2009). Following the completion of the questionnaire, the results of the assessment and analysis were used to compare the results to the normative data for the mark group. To determine

the location of an attribute, compute its average value using the formulas below.

$$\bar{X} = \frac{\sum X_i}{n}$$

$$\bar{Y} = \frac{\sum Y_i}{n}$$

Where:

Average satisfaction/performance level = \bar{X} , \bar{Y} = Average importance/importance Score, X_i = Score for Customer Satisfaction, and n = Number of responses

IPA analysis is presented as a two-dimensional quadrant that is pictorial and simple to understand. The graph's shape is shown in Figure I. Graphs are divided into 4 quadrants based on expectations and performance.

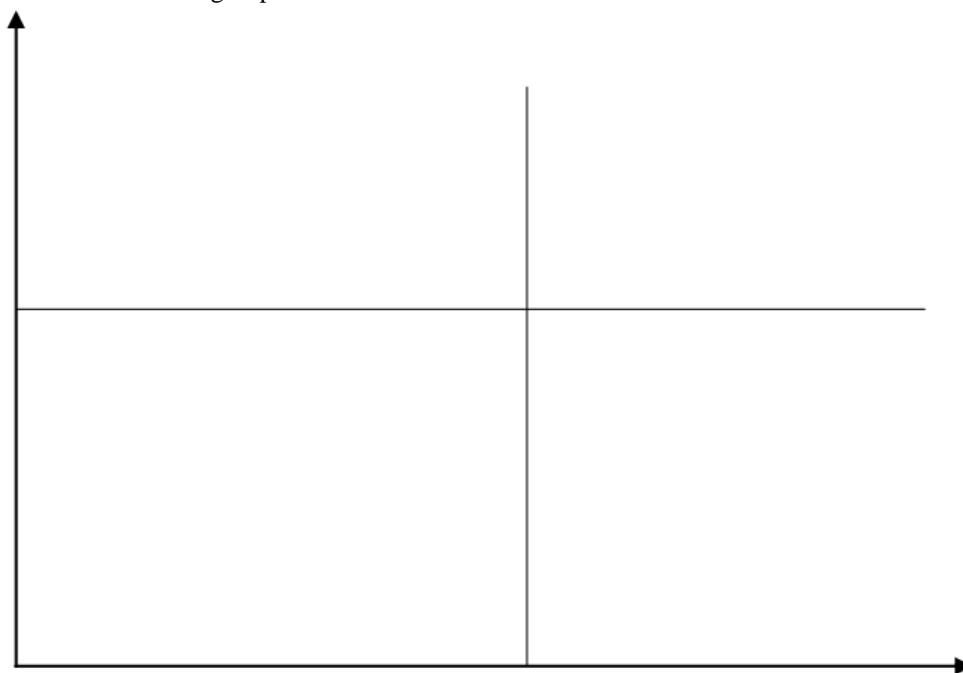


Figure 1: Performance Analysis for Quadrant Importance

We employ the following quadrants:

I. Pay Attention Here (Pay Attention Here/Top Priority): The management is required to allot sufficient resources to boost the performance of the numerous variables since the existing elements in this quadrant are thought of as factors that are currently inadequate. It is more important to enhance the elements in this area.

II. Keep up with the achievements (good work achievement): The management is required to IV. Possibly Overkill (too Excess): Since the factors in this quadrant are deemed Not Too

make sure that the performance of the institution it manages can continue to maintain the achievements that have been made because factors located in this quadrant are important and expected to support customer satisfaction.

III. Low Priority (low priority): Consumers do not view the aspects in this quadrant as being particularly essential or unexpected, thus management does not feel the need to give them a high priority or focus excessive attention.

Important and/or Not Too Expected, management must divert resources related to them to other

factors that are still in need of improvement and have a higher priority for handling. These factors include those in the quadrant.

3. Research Approaches

3.1 Research Introduction

This research was conducted over several stages, with the first one beginning with preparatory investigations that looked at the immediate conditions in the field and the on-the-ground professional reinforcement of the cliff river in relation to the problem. The problem was identified and formulated using focus studies that identified the level of accident work, the reason for the accident, the procedure for safety work that had already been carried out, and the implementation strategy for safety right work on the job during reinforcement of the cliff river. These are the actions that are done while keeping a visual eye on the scenario that will be investigated. Researchers conduct studies while doing field observations to support this study.

3.2 Outline of Sources

Overview references to use in your investigation to dig up relevant information. Information and data used as support This research was based on information found in books, journals, papers, the internet, personal experiences, and news, as well as information on accidents that had already happened on the profession reinforcement cliff river. From review references, it was anticipated to receive technique data processing.

3.3 Study parameters

On The anticipation variable and the satisfaction variable make up the variables in this study. This variable is selected and compiled using the research methodology. The introduction includes references to prior literature as well as investigations that have been conducted. Studies the introduction itself through the examination of pertinent OHS-related papers, the observation of method implementation in the field, direct interviews with relevant parties, and direct experience with system safety work implementation in the field.

3.4 Variable for Satisfaction

The variable in This study examines the relationship between performance consultant supervisor satisfaction with performance. The variables used to evaluate that variable are I and e. Safety Work, Identification Indicator System Activities related to the preparation of indicators and the implementation of indicator systems System safety work construction indicators for construction and improvement.

Identification of safety-related system variables.

1. K3 guidelines for every profession
2. You discussed the OHS policy in the firm.
3. You analyzed the OHS dangers and their control.
4. recognizing the need for K3 instruction
Varying preparation and safety tasks;
 1. socialization K3's risks in your company
 2. Choose an activity depending on the degree of hazard associated with each occupation
Construction work, system safety, and application variables
 1. How to use to decrease risk in the firm you.
 2. There is a state of emergency.
 3. The organization has a system for identifying the risks associated with K3. 4. K3 policies include a commitment to follow all applicable rules and laws. Restore
Construction of the variable system safety work:
 1. Be aware of the possibility of consequences if you ignore established protocol.
 2. recording findings and making notes K3 repair and preventative
 3. look into the issue, identify its root, and take steps to prevent a recurrence of the hazard.
 4. assess each step performed to avoid OHS risks and take the appropriate action.

Questionnaire on design

For In order to conduct analysis, analytical procedures that are helpful indexes for describing knowledge and equipment as well as facilities were applied. There are two Value Category Indexes utilised in Table III and

Table IV. Evaluation Against Reaction Satisfaction (Table IV)

Evaluation knowledge to indicator	Value/Score
1. No Ever (TP)	1
2. Rarely (J)	2
3. Sometimes (KK)	3
4. Enough Often (CS)	4
5. Always (S)	5

Table V. Assessment of Reaction Hope

Evaluation equipment and facilities against indicators	Value/Score
1. No Important (TP)	1
2. Less Important (KP)	2

3.	Enough Important (CP)	3
4.	Important (P)	4
5.	Very Important (SP)	5

Table VI: Performance perception question

OCCUPATIONAL SAFETY PERCEPTIONS		TP	J	kk	CS	S
A.						
1	Is there always a K3 policy in every job	1	2	3	4	5
2	is OHS policy in the company you communicated	1	2	3	4	5
3	is analysis OHS hazards and their control already run	1	2	3	4	5
4	is there is identification need K3 training	1	2	3	4	5
5	is there is socialization the dangers of K3 in the company you	1	2	3	4	5
	is company you determine activity based on identification danger each profession	1	2	3	4	5
7	is there is application procedure for reduce risk in the company you	1	2	3	4	5
8	is there is procedure state company emergency _ you	1	2	3	4	5
	is there is procedure identification the dangers of K3 in the company you so that there is prevention and evaluation for reduce accident work	1	2	3	4	5
	is K3 policies include commitment to use obey regulation legislation that _ apply	1	2	3	4	5
11	is you always know consequence risk if you no obey established procedure _	1	2	3	4	5
12	is company you documenting / taking notes results K3 repair and prevention	1	2	3	4	5
	is company you investigate problem, determine cause and take action so as not repeated danger of K3	1	2	3	4	5
	is company you evaluate every action taken for prevent OHS hazards and apply proper action _	1	2	3	4	5

Table VII. Perceptions of important questions

No.	Question Items	Perception Respondent				
		Against Response Hope				
		TP	KP	CP	P	SP
A.						
1	how much does it matter K3 policy in each profession	1	2	3	4	5
2	how much does it matter OHS policy in the company you communicated	1	2	3	4	5
3	how much does it matter analysis OHS hazards and their control run	1	2	3	4	5
4	how much does it matter there is identification need K3 training	1	2	3	4	5
5	how much does it matter socialization the dangers of K3 in the company you	1	2	3	4	5
6	how much does it matter company you determine activity based on identification danger each profession	1	2	3	4	5
7	how much does it matter there is application procedure for reduce risk in the company you	1	2	3	4	5
8	how much does it matter there is procedure state company emergency _ you	1	2	3	4	5
9	how much does it matter procedure identification the dangers of K3 in the company you so that there is prevention and evaluation for reduce accident work	1	2	3	4	5
10	how much does it matter K3 policies include commitment to use obey regulation legislation that _ apply	1	2	3	4	5
11	how much does it matter know consequence risk if you no obey established procedure _	1	2	3	4	5
12	how much does it matter company documenting / taking notes results K3 repair and prevention	1	2	3	4	5

13	how much does it matter company investigate problem, determine cause and take action so as not repeated danger of K3	1	2	3	4	5
14	how much does it matter company evaluate every action taken for prevent OHS hazards and apply proper action _	1	2	3	4	5

Respondents to the hope questionnaire on work safety

Data Collection

30 respondents will get questionnaires, including 15 contractors, 6 consultants, 4 PPK/PPTK, and 5 directors in the field. This is since the target researcher received responses from contractors, consultants, and government entities (owner). According to the findings, there are several government agencies, consultants, and contractors (owner).

Research Findings

In order to collect data for this study, two surveying strategies were used:

1. First data. Information gathered through a research survey is used to find existing information that supports the study. In terms of the approach used for data collecting for this initial survey, these are:

a. A survey. A questionnaire is an incorrect way of gathering public opinion since it asks respondents to respond to questions that have already been presented by the researcher.

2. Secondary Information. Data from a survey that was reviewed by a field experiment in direct conditions to find existing data that may be used to enhance study. In terms of the approach used for data collecting for this initial survey, these are:

a. An observation, first. This method is employed to directly or indirectly observe a field's condition when cliff-diving. Researchers act as observers with the ability to see objects and emotions, as well as articulate and understand difficulties that arise.

b. Interviews. Data collecting through staged interviews with direct access to experts is incorrect. The interview was then developed based on the

findings to get information for developing plans and initiatives.

4. Result analysis and discussions

Gathering and processing of data

From the questionnaires that have been back, researcher succeed get 30 respondents consisting of 15 workers contractor people, 6 people consultant, 1 PPK, 3 PPTK, 5 people directors field. This is because the target researcher of course forgot respondent from contractors, consultants and agencies government (owner). From the results obtained seen number of contractors, consultants and agency government (owner), and do accident data collection work on profession docking cliff siring river at the Department of Work Public and Residential Regency Balangan on year 2020 with mark contract under Rp. 200,000,000.00 is no there is accident work same once.

Validity and Reliability Test

Validity check

The correctness of the questionnaire instrument is measured against the idea being studied using a validity test. The following is the foundation for the validity test's decision-making process:

(There is no association between the study instrument and the questionnaire, hence it is invalid) (There is a correlation between research instruments or valid questionnaires)

If the value is or, the choice is to reject it, indicating that there is validity to the questionnaire or that there is a link between the research tools. The findings of the test validation are shown in Table VII.

Table VIII: 28 entries in of Validity

Variable Items	Y_1	Y_2		r_{tabel}	Information
1	0.764	0.940	>	0.361	Valid
2	0.753	0.924	>	0.361	Valid
3	0.594	0.911	>	0.361	Valid
4	0.793	0.818	>	0.361	Valid
5	0.734	0.445	>	0.361	Valid
6	0.678	0.954	>	0.361	Valid
7	0.652	0.786	>	0.361	Valid
8	0.366	0.841	>	0.361	Valid
9	0.706	0.764	>	0.361	Valid
10	0.556	0.729	>	0.361	Valid
11	0.744	0.886	>	0.361	Valid
12	0.736	0.810	>	0.361	Valid
13	0.407	0.848	>	0.361	Valid
14	0.684	0.893	>	0.361	Valid

Given that the total number of respondents (N) utilized was 30, a value of 0.361 was achieved using a significance threshold of 5%. According to the validity test findings in the table above, 14 out of the items have known values, making them valid. The 14 items that make up the full questionnaire are therefore legitimate and can be utilized as research standards.

2. Test for reliability

A reliability test is a metric that demonstrates the degree to which a measuring instrument can be relied upon to provide accurate findings, ensuring that the results are consistent even when the research is repeated. The reliability test's decision-making criteria are as follows:

Hypothesis:

- H_0 : (Instrument unreliable questionnaire)
 - H_1 : (Instrument reliable questionnaire)
- If the employed instrument's Cronbach value Alpha is more than 0.6, the which mean instrument reliable questionnaire should be rejected. The category for dependability coefficient is:

- Very high dependability is between 0.80 and 1.00.
- 0.60 to 0.80 indicates strong dependability.
- The dependability ranges from 0.40 to 0.80.
- Low reliability: 0.20 to 0.40

Alpha Cronbach's

based on the analysis performed using the SPSS version 26 software, as displayed in Table VIII. This research may be regarded as trustworthy since the variable questionnaire has a known Cronbach value Alpha () of 0.793, and the fixed questionnaire has a known value Alpha () of 0.954.

Application Variable Data for Work Safety

The maximum score for each response is 5, which is usually a very good response; this is intended to gauge understanding of workplace safety as well as the impact of facilities and equipment on workplace accidents. Tables IX and X show the assessment of perceptions of performance and significance.

Table X: Evaluation of perceived performance

Knowledge assessment of indicators	Value/Score
1. No Ever (TP)	1
2. Rarely (J)	2
3. Sometimes (KK)	3
4. Enough Often (CS)	4
5. Always (S)	5

TableXI: Perceived importance assessment

Assessment of equipment and facilities against indicators	Value/Score
1. No Important (TP)	1
2. Less Important (KP)	2
3. Enough Important (CP)	3
4. Important (P)	4
5. Very Important (SP)	5

A Likert scale is used to evaluate the application of work safety in Tables VI and VII. The number of respondents who answered the questionnaire will be multiplied by the score in order to subsequently add up the scores to determine the value of the application of work safety. 28 questions illustrating the application of work safety to the rate of work accidents were asked of respondents in the survey on the application of work safety. The questionnaire includes the following questions.

Customer Happiness Index (CSI)

Customer Analysis Satisfaction Index employing survey data between awareness of workplace safety, safety equipment and facilities, and the degree of workplace safety. Table IV.5 yields the Mean Satisfaction Score (MSS). Yet, Table IV.6 yields the Mean Importance Score (MIS). Thus that the mark Weight Factor (WF) and Weight Score (WS), as shown in Table XI, may be determined.(Redinger, 2019)

Table XII: Results of the CSI calculation

$MSS = \frac{[\sum_{i=1}^n X_i]}{n}$	$MIS = \frac{[\sum_{i=1}^n Y_i]}{n}$	$WF = \frac{MIS_i}{\sum_{i=1}^p MIS_i} \times 100 \%$	WSi = WF X WSS
4.13	3.80	7.20	29.73
3.93	3.73	7.07	27.77
3.90	3.73	7.07	27.56
3.47	3.50	6.63	23.01
3.63	4.47	8.47	30.74
3.47	3.73	7.07	24.52
3.47	3.57	6.76	23.47
3.30	3.90	7.39	24.38
3.47	3.27	6.19	21.49
3.67	4.43	8.39	30.80
4.37	3.43	6.50	28.39
3.33	3.73	7.07	23.53
3.20	3.90	7.39	23.64
3.57	3.60	6.82	24.35
$\sum_{i=1}^p MIS$			363.36

Based on Table XI, it is possible to get the CSI value using the formula below:

$$CSI = \frac{\sum_{i=1}^p MIS}{HS} \times 100\% = \frac{363,36}{5} \times 100\%$$

With a CSI score of 72,67%, it can be inferred from Criterion Level Satisfaction CHAPTER II page 32 that workers already have knowledge of and are happy with work facilities. (Suhartina et al., 2020)

Performance Analysis of Importance (IPA)

Importance Performance Analysis_ using mean score between perceptions and expectations of employees on the degree of work safety using questionnaire data. Table XII in Table XII shows the findings of Importance Performance Analysis (IPA). (Redinger, 2019; Rizbudiani & Jaedun, 2021)

Table XIII: Respondents' overall ratings of employees' views and expectations of workplace safety

VariableItems	PerceptionMeanScore (x)	ExpectedMeanScore (y)
1	4.13	3.80
2	3.93	3.73
3	3.90	3.73
4	3.47	3.50
5	3.63	4.47
6	3.47	3.73
7	3.47	3.57
8	3.30	3.90
9	3.47	3.27
10	3.67	4.43
11	4.37	3.43

12	3.33	3.73
13	3.20	3.90
14	3.57	3.60
Total	50.91	52.79
mean	3.64	3.77

The value data is provided in the form of quadrants after getting the average value (mean) so that indicators or variables may be sorted out into the four quadrants. (Ani, 2020) Figure II shows the findings of the Importance Performance Analysis (IPA).

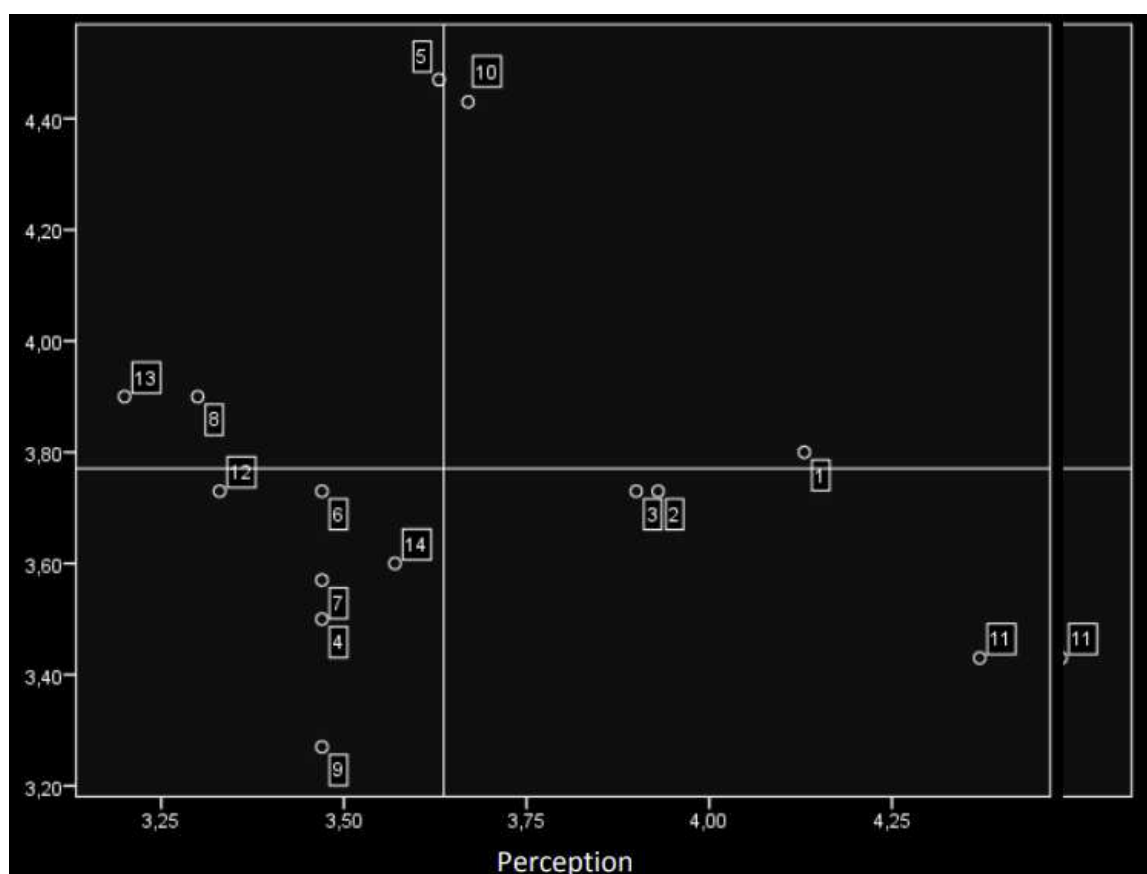


Figure II: IPA quadrant diagram Based on the variables can be divided into Quadrants

1. Quadrant I

Quadrant I display the elements or characteristics that are thought to require attention:

- Varying Preparation Safety Work: (5) Applying the company's OHS hazards' socialization; (Bharata & Syaaf, 2014)
- Application Variables System Safety Work: (8) Does the organisation have emergency procedures?
- Repair Variable System Safety Work: (13) Examining the issue, identifying the root cause, and taking appropriate steps to prevent OHS dangers from recurring.

2. Quadrant II

In order for the management to guarantee that employees can sustain their performance, the following variables or traits are shown in

Quadrant II as being significant and anticipated to be supportive factors:

- Variable System Safety Work Identification: (1) Each work having an OHS policy.
- Application Variables System Safety Work: Commitment to OSH Policies to Comply with Laws and Regulations.

3. Quadrant III

The third quadrant demonstrates characteristics that are not prioritised by management because they have low levels of perceived or real performance at the same time:

- Work Safety System Identification Variables: The identification of K3 training requirements.
- Preparing Variable Safety Work: (6) Choosing activities based on how each job in the firm is classified in terms of its hazards.

- c. Application Variables System Safety Work: (9) OSH hazard identification methods as prevention and assessment to decrease work accidents; (7) Adoption of measures to reduce risk in the organisation;
- d. Repair Variable System Safety Work: (12) Documenting the outcomes of K3 prevention and improvement; (14) Evaluating each step done to prevent OSH dangers and taking the necessary measures.

Quadrant IV

For management to focus on other matters, Quadrant IV displays aspects that are not overly expected by customers but already have a positive opinion need:

- a. Variable System Identification Safety Work: (2) Discussion of OSH policy inside the organisation; (3) Use of K3 hazard analysis and its control;
- b. Understanding of risk effects and identification of variable system safety work;

Interview

In order to confirm the degree of work accidents and strategies, the author conducted direct interviews with Mrs. Rosma Hilda, ST, who will be the Chief of the Water Resources Division of the Public Works and Spatial Planning Office of the Balangan Regency in 2020. According to the interview's findings, there will be activities at the Balangan Regency Public Works and Spatial Planning Service for the 2020 Fiscal Year with a value less than Rp. 200,000,000,00 for riverbank reinforcement work. At Appointment Direct, neither a record of an accident at work nor any notes about its presence were discovered. A good plan of action is also Uses for Upgrading K3 systems include:

1. Before, the firm that emphasises system safety work was more heavily stressed in the current process procurement. and it should be highlighted more regarding system safety work and equipment safety good work just before the profession begins.
2. Supervisor for KDP, PPTK, and Consultants to perform System Safety checks Focus on starting the processing
3. Create an internal rule with a penalty if it is not followed. Work on System Safety
4. PPK hired the incorrect individual to oversee System Safety Tasks.
5. Create Guidelines System Safety jobs that are appropriate for each trade.

5. Research Conclusion

Based on the research done for the study, it can be determined that there are various perspectives and expectations from the participants on reinforcing

cliff river work safety for knowledge workers. The following finding from this investigation is:

1. The degree of participant satisfaction with the profession reinforcement cliff river on activities at the Department of Work General and Regency Spatial Planning's 2020 budget is under Rp. 200,000,000, and the system Appointment Direct is equivalent to 72.2, 67%.

This indicates that the participants were happy with the system safety work on the cliff river's professional reinforcement.

2. Perceptions and/or Actual Performances that Exist in: (5) Socializing OHS Hazards within the Company; (8) The Presence of Emergency Procedures within the Company; and (13) Investigating the Issue by Determining the Cause and Taking Actions So That The OSH Hazards Do Not Recur; on Currently Not Satisfactory So That The Management Is Obligated To Allocate Adequate Resources To Improve The Performance Of These Diverse Actors.

3. The following K3 implementation techniques can be used on Cliff river's profession-reinforcement program:

- a. Formerly, the firm that emphasises system safety work was more heavily stressed in the current procedure of procurement. and it should be highlighted more regarding system safety work and equipment safety good work just before the profession begins.
- b. Supervisor for KDP, PPTK, and Consultants to perform System Safety Work Checks prior to processing
- c. Create an internal rule with a penalty if it is not followed. Work on System Safety
- d. PPK hired the incorrect individual to oversee System Safety Tasks.
- e. Create Guidelines for System Safety jobs that are appropriate for each profession.

Just 30 individuals responded to the suggestion poll, therefore there is a high potential for inaccuracy. In order to reduce zoom out error, surveys should be conducted with a larger number of participants overall.

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