Role Analysis and Mandor Functions on Bridge and Building Construction Projects in District Ogan Komering Ulu

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Abstract. The foreman as one of key factors in the success of construction activities, but in reality the role and function of the foreman has not been effective. The aims to identify the description of the role and function of the foreman in the organization of the construction project and information about owner's satisfaction. The population is all owner, contractor, and workman who work in bridge and building construction project in Ogan Komering Ulu. The approach of this study using a quantitative approach that is by survey with questionnaires. Data processing is done by using likert scale by giving value on each answer choice. After that was analyzed with SPSS version 20 computer program. There was a significant difference (p<0.05) between project the expectant owner's level of 4.54 ("always" expected) greater than the owner's satisfaction 4.16 (satisfactory) with the role of the foreman on bridge and building project. There was a significant difference between owner's expectation of 4.59 ("always" expected) greater than the owner's satisfaction 4.30 (satisfactory) with the foreman's function. It is the importance of the role and function of the foreman so that it’s necessary to increase the competence of foreman and formulate more effective working agreement mechanism.

Keywords: role, function, foreman

1. Introduction
The success of a project is determined by planning and control. In the other hand, the quality of planning and control of a project is determined by the quality of the human resources or the people within a project [1]. Projects are affected by two main components, they are service providers (contractors) and funders / owners. In this case, it is a government institution / government [2].

In the construction project implementation, the contractor needs a variety of resources. Among the resources needed, one of them is labor/worker [3]. Workers are implementers directly related to the employment. Workers have a big part in project completion as well as determinants in project success [4]. The group of workers working on the contractor was brought in and led by someone known as the foreman. A foreman is someone who has the ability to manage jobs and has technical responsibility [5]. The foreman's job is to bring in a number of workers based on the qualifications required and lead or supervise their work [6]. The role of foreman in construction is required to control the quality of work. Furthermore, the results of the work in accordance with the provisions of technical specifications and drawings of planning. In this situation the foreman needs the skills to manage wages for his workers as his main attraction [7]. Therefore, the foreman's job has essentially grown into a human resources manager. Hence, the foreman is directly related to the production process. Thus, the position of the foreman within the management system is strategic and profitable [8].

The foreman has a big role, so the more effective use of the foreman will improve the contractor's performance. This can lead to the success of a project. The attachment between the contractor and the foreman is very close, both mutually supportive and interdependent. Therefore, enhancing the
The competitiveness of contractors should be done through cooperation between contractors and foremen [9].

The presence of the foreman is very important. That is one of the key success factors of the construction project. Then, it should be explored more deeply about the role and the foreman’s function. It was expected to provide information on how appropriate the roles and functions were played by the foreman [10]. Based on previous research, the results obtained by the contractor have high expectations on the role of the foreman. The average value of it was 4.49. On the other hand, the average value of contractor satisfaction on the role of the foreman was lower. Its value was 3.14. Contractor's expectation (4.57) for the function performed by the foreman was also higher than the contractor's satisfaction level (3.07). From the above research concluded that the contractor's expectation on the foreman’s function was high. But that was not the same as reality. In this condition, the level of foreman's satisfaction was still low compared to the roles and functions that have been carried out by the foreman. So it still needs attentions and improvements to the roles and functions that have been carried out by the foreman [11].

Research on the satisfaction of the role and foreman’s function was assessed by the contractor, whereas in this study the satisfaction of the foreman's role and function was judged by the owner. Therefore, the assessment was more objective than the assessment done by the contractor. So that the researcher will conduct a research entitled "Role Analysis and the Foreman’s Function on Bridge Construction Projects and Building in Ogan Komering Ulu Regency".

The purpose of this study was to identify the description of the role and foreman’s function in the labor group on the construction project. In addition, this study was also expected to provide information about how appropriate the foreman in playing the role and function that was assessed from the level of owner satisfaction.

2. Method
The approach used in this research was using the quantitative approach. This study conducted a survey through the distribution of questionnaires to respondents. The location of the research was carried out on the projects in the Ogan Komering Ulu District of South Sumatra, which was being implemented in 2016. The research variables that will be analyzed in this research were the role and the foreman's function.

The population of this research was all owner, foreman, and workman who work in bridge construction project and building in Ogan Komering Ulu Regency. The sampling technique in this research was the purposive sampling that was the contractor, workman, and owner who worked in 10 bridge construction projects and 10 building projects in 2016 in Ogan Komering Ulu Regency. The sample size was 80 people with 20 contractor, 20 owner and 40 workman.

The survey data obtained two types of data. The first was data on the expected frequency of the role and foreman’s function (according to the contractor, the workman and owner) and the second data was the owner's level of satisfaction data about the roles and functions performed by the foreman. Data processing is done by using likert scale by giving value on each answer choice. After that was analyzed with SPSS version 20 computer program.

The expected frequency of the foreman's role and function with the owner's level of satisfaction then the foreman's role and function was shown in Cartesian diagram. The result was consisting of four quadrants also known as the performance-level matrix. Furthermore, the roles and functions can be seen in four quadrant.

3. Results and Discussion
The role and function of the foreman is presented in terms of mean and standard deviation. Average (mean) is the sum of the values of members of a group (ΣXn) divided by the number of members of the group. While the standard deviation is a measure used to measure the amount of variation or distribution of a number of data values. The lower the standard deviation, the closer to the average, whereas if the standard deviation value is higher then the width of the range of data variations. So the
standard deviation is a big difference from the sample value to the average. The expected frequency of role and function of the foreman is interpreted by value (1 = never), (2 = rare), (3 = sometimes), (4 = often), (5 = always). The satisfaction frequency of role and function of the foreman is interpreted by value (1 = very unsatisfactory), (2 = unsatisfactory), (3 = satisfactory), (4 = satisfactory), (5 = very satisfactory).

3.1 Expectation's Level of foreman's role and function based on the contractor

3.1.1 The managerial role of the foreman expected by the contractor

Below is the managerial role of the foreman expected by the contractor:

| The Role of the Top 10 Foreman expected by the Contractor | Bridge (n=10) | Building (n=10) |
|--------------------------------------------------------|--------------|----------------|
| 1. Figure/ symbol x(SD)                               | 4.20(0.63)   | 4.25(0.75)     |
| 2. Leader x(SD)                                       | 4.56(0.42)   | 4.03(0.57)     |
| 3. Intermediaries/ connectors x(SD)                    | 4.70(0.29)   | 4.26(0.56)     |
| 4. Monitors x(SD)                                     | 4.80(0.42)   | 4.70(0.48)     |
| 5. Information disseminator x(SD)                      | 4.50(0.57)   | 4.10(0.89)     |
| 6. Spokesman x(SD)                                    | 4.40(0.56)   | 4.25(0.79)     |
| 7. Entrepreneurship x(SD)                             | 4.35(0.78)   | 2.95(1.38)     |
| 8. Disorder controller x(SD)                           | 4.60(0.70)   | 4.60(0.52)     |
| 9. Resource Allocator x(SD)                            | 4.60(0.32)   | 4.70(0.35)     |
| 10. Negotiators x(SD)                                  | 4.48(0.43)   | 4.48(0.40)     |

Based on Table 1, the top 10 foreman was expected by the contractor on the bridge project, namely the role of the monitor with an average score of 4.80. That means "always" the contractor was expected to be run by the foreman. While on the building project is the role of monitoring and the role of resource allocator with an average score of 4.70. That means "always" the contractor was expected to be run by the foreman.

On the bridge project the contractor hopes on the role of the foreman as a leader is higher than the project in the building because on the construction of the bridge the workmans usually rest or stay in the camp during the project while on the construction of the building most of the workmans back home. This has led to the role of the foreman in development at the bridge project as a leader who can motivate the workman spirit. While on the bridge project, the contractor's expectation on the role of the foreman as an entrepreneur is higher than the project in the building because with the stay of the campers in the camp cause they can not do other jobs outside who can make money besides carpenters during the project while on the construction of the completed workmans work and go home in the afternoon can directly do other work besides carpenters. This also causes the foreman to build bridges
of his role as an entrepreneur who can train his skill at the camp so that they may be expected to be foremen in future projects.

A study discusses the results of a survey involving both management and construction workers aimed at determining shifting roles and functions of the foreman on the construction project organization, as well as seeking ways for more appropriate improvements to new settings in the construction industry. Although all expectations are equally high in the role and function of the foreman, particularly research has shown that contractors tend to expect the foreman to play a high information role. The idea is reflected in the high expectation on the role of the foreman as a monitor, disseminator and spokesperson. The contractor seems to expect the foreman to be their subordinate who plays an important role as the caretaker who will deliver all the top-down flow of information to the workers. This expectation contrasts with what the foreman thought. This study shows that strong interpersonal roles seem to be consistent with the role of traditional foremen as informal leaders and operators working for their people [11].

3.1.2 Managerial Maintenance Function expected by Contractor
Below is the managerial function of the foreman expected by the contractor:

| Foreman's function | Bridge (n=10) | Building (n=10) |
|--------------------|--------------|-----------------|
| 1. Planning x(SD)  | 4.13(0.58)   | 4.20(0.59)      |
| 2. Organizing x(SD)| 4.77(0.21)   | 4.60(0.16)      |
| 3. Moving x(SD)   | 4.18(0.39)   | 3.97(0.72)      |
| 4. Controlling x(SD)| 4.54(0.22)   | 4.33(0.32)      |

Based on table 2, the largest foreman's functions expected by contractors on bridge projects and building projects was the organizing function with an average score of 4.77 ("always" expected) and 4.60 ("always" expected). From the contractor's assessment of the bridge and building project, the largest Foreman's function was the organizing function. In the field implementation of the foreman’s function as an organizer in the project was the foreman that can always coordinated the work in the field with the field implementers to prevent errors.
3.2 Expectancy Level of the Role and Foreman's Functions Based on the Labor Parties

3.2.1 The Managerial Roles of the Foreman expected by the Labor Parties
Below is the managerial role of the foreman expected by the labor:

| Table 3. The Role of the Top 10 Foreman expected by the Labor |
|-------------------------------------------------------------|
| The Role of the Top 10 Foreman | Bridge (n=20) | Building (n=20) |
|-------------------------------|---------------|-----------------|
| 1. Figure/ symbol x(SD)      | 4.55(0.39)    | 4.02(0.63)      |
| 2. Leader x(SD)               | 4.57(0.36)    | 4.22(0.45)      |
| 3. Intermediaries / connectors x(SD) | 4.50(0.32) | 4.22(0.41)      |
| 4. Monitors x(SD)             | 4.40(0.51)    | 4.35(0.49)      |
| 5. Information disseminator x(SD) | 4.22(0.49) | 4.03(0.60)      |
| 6. Spokesman x(SD)            | 4.60(0.38)    | 4.07(0.63)      |
| 7. Entrepreneurship x(SD)     | 4.45(0.60)    | 3.70(0.98)      |
| 8. Disorder controller x(SD)  | 4.90(0.31)    | 4.05(0.94)      |
| 9. Resource Allocator x(SD)   | 4.87(0.27)    | 4.55(0.43)      |
| 10. Negotiators x(SD)         | 4.21(0.35)    | 4.46(0.42)      |

Based on table 3, the role of the top 10 most foreman was expected by the workmans on the bridge project was the role of disturbance handler. The average value was 4.90 ("always" expected). On the other hand, the average resource allocator's role in building projects was 4.55 ("always" expected).

3.2.2 Managerial Function of The foreman expected by the Labor

| Table 4. Functions of the Foreman expected by Labor |
|-----------------------------------------------------|
| Foreman function | Bridge (n=20) | Building (n=20) |
|------------------|---------------|-----------------|
| 1. Planning x(SD) | 4.28(0.35)    | 4.22(0.29)      |
| 2. Organizing x(SD) | 4.32(0.31) | 4.60(0.21)      |
| 3. Moving x(SD)   | 4.17(0.33)    | 4.10(0.34)      |
| 4. Controlling x(SD) | 4.60(0.21) | 4.35(0.23)      |
Based on table 4 of the largest foreman's function expected by the workman on the bridge project was the control function. The average value was 4.60 ("always" expected) while the results on the building project (organizing function) with an average score of 4.60 ("always" expected).

In the function of organizing and controlling the higher function of the building project than the bridge project according to the expectations of workmans because the workers expect the type of work they do in the project according to their respective expertise such as ceramic tiling installation ceramic installation work instead of doing the work of pembesian, so the results can be justified.

3.3  Expectations Level of Roles and Overseer’s Function by Owner

3.3.1  The managerial role of the foreman expected by the Owner

Table 5. The Role of the Top 10 Foreman expected by Owner

| The Role of the Top 10 Foreman | Bridge (n=10) | Building (n=10) |
|-------------------------------|--------------|----------------|
| 1. Figure/ symbol x(SD)      | 4.65(0.41)   | 4.35(0.71)     |
| 2. Leader x(SD)              | 4.63(0.33)   | 4.57(0.39)     |
| 3. Intermediaries x(SD)      | 4.67(0.27)   | 4.43(0.47)     |
| 4. Monitor x(SD)             | 4.80(0.42)   | 4.50(0.71)     |
| 5. Information disseminator  | 4.77(0.32)   | 4.10(0.98)     |
| 6. Spokesman x(SD)           | 4.50(0.53)   | 4.45(0.64)     |
| 7. Entrepreneurship x(SD)    | 4.30(0.35)   | 3.45(1.19)     |
| 8. Disorder Controller x(SD) | 4.40(0.52)   | 4.60(0.52)     |
| 9. Resource Allocator x(SD)  | 4.40(0.84)   | 4.75(0.35)     |
| 10. Negotiator x(SD)         | 4.73(0.49)   | 4.53(0.51)     |

Based on table 5 the role of the top 10 most foreman was expected by the owner on the bridge project, it was the role of the monitor. The average value was 4.80 ("always" expected), whereas in the building project (the role of resource allocator) had an average score of 4.75 ("always" expected).

3.3.2  Managerial Function of the foreman expected by Owner

Table 6. Functions of the Foreman expected by the Owner

| Foreman's function | Bridge (n=10) | Building (n=10) |
|--------------------|---------------|----------------|
| 1. Planning x(SD)  | 4.37(0.54)    | 4.40(0.55)     |
| 2. Organizing x(SD)| 4.96(0.07)    | 4.75(0.28)     |
| 3. Moving x(SD)    | 4.57(0.29)    | 4.32(0.42)     |
| 4. Controlling x(SD)| 4.82(0.12)  | 4.58(0.23)     |
Based on table 6 of the most expected foreman's functions by the owner was the organizing function on the bridge project. The result was 4.96 and in the building project value was 4.75 ("always" expected). In the average organizing function, the score on the bridge project was 4.96 ("always" expected) bigger than 4.75 ("always" expected) building project. In the control function, the average value of the bridge project was 4.82 ("always" expected) bigger than the building project value of 4.58 ("always" expected).

The function of organizing and controlling function in the bridge project is higher than the building project because in the construction of the bridge project is more complicated and longer than in the building so the function of the foreman as the organizer in the project that can always coordinate the work in the field with the field implementer to avoid errors in taking action and workmanship can run on target, as well as the supervisory function as a control that can always control the execution of the workmanship of the project in accordance with the planned.

3.4 Owner's level of satisfaction with roles and functions performed by the foreman

3.4.1 Owner's level of satisfaction with the managerial role run by the foreman

Table 7. The level of owner satisfaction with the top 10 roles that the foreman has performed

| The Role of the Top 10 Foreman | Bridge (n=10) | Building (n=10) |
|-------------------------------|--------------|-----------------|
| 1. Figure/ symbol x(SD)      | 4.25(0,79)   | 4.15(0,97)      |
| 2. Leader x(SD)              | 3.87(0,42)   | 4.40(0,44)      |
| 3. Intermediaries/ connectors x(SD) | 3.67(0,49)   | 4.33(0,41)      |
| 4. Monitor x(SD)             | 3.60(1,17)   | 4.30(0,82)      |
| 5. Information disseminator x(SD) | 4.03(0,67)   | 4.43(0,38)      |
| 6. Spokesman x(SD)           | 4.25(0,71)   | 4.50(0,52)      |
| 7. Entrepreneurship x(SD)    | 3.90(0,84)   | 3.95(0,55)      |
| 8. Disorder controller x(SD) | 3.90(0,87)   | 4.30(0,82)      |
| 9. Resource Allocator x(SD)  | 3.85(0,71)   | 4.25(0,54)      |
| 10. Negotiator x(SD)         | 4.02(0,57)   | 4.52(0,39)      |

Based on table 7 the smallest satisfaction level of the top 10 roles that have been executed by the foreman according to the owner on the bridge project was the role of monitors. Furthermore, the average score was 3.60 (satisfactory), while on the building project was the role of entrepreneur with an average score of 3.95 (satisfactory). The average value of the leader role in the bridge project was 3.87 (satisfactory), it was smaller than the building project value of 4.40 (satisfactory). The average value of the intermediary role in the bridge project was 3.67 (satisfactory) smaller than the building project value of 4.33 (satisfactory).
3.4.2 Owner's level of satisfaction with the managerial function performed by the foreman

Table 8. The level of owner satisfaction with the function that has been executed by the foreman

| Foreman's function | Bridge (n=10) | Building (n=10) |
|--------------------|--------------|-----------------|
| 1. Planning x(SD)  | 3.97(0.50)   | 4.48(0.37)      |
| 2. Organizing x(SD)| 4.15(0.43)   | 4.55(0.24)      |
| 3. Moving x(SD)    | 4.13(0.41)   | 4.42(0.54)      |
| 4. Controlling x(SD)| 4.27(0.31)  | 4.48(0.21)      |

Based on table 8 the least satisfaction level of the function that has been executed by the foreman according to the owner on the bridge project was the planning function. The average score was 3.97 (satisfactory), while in the building project was the function of moving. The average value was 4.42 (satisfactory).

3.5 Comparative analysis of the expected level of role and foreman’s function according to the owner with the level of owner’s satisfaction in the role and function performed by the foreman.

3.5.1 Expectation level of the foreman’s role based on the owner - Owner's satisfaction level to the implementation of the foreman’s role.

Table 9. Comparison between the owner's expectations and satisfaction level with the execution of the Foreman’s role

| Project              | Owner's expectation level | Owner's satisfaction level | p value* |
|----------------------|---------------------------|---------------------------|----------|
| 1. Bridge x(SD)      | 4.70(0.16)                | 3.97(0.38)                | <0.001   |
| 2. Building x(SD)    | 4.38(0.34)                | 4.35(0.33)                | 0.665    |
| 3. Bridge and building x(SD) | 4.54(0.31) | 4.16(0.40) | 0.001    |

Description: *) Paired T Test

Based on table 9, the average value of the owner's expectation according to the foreman’s role on the bridge project was 4.70 ("always" expected) bigger than 4.38 ("often" expected) building project. While the average value of the owner's level based on satisfaction with the role that the foreman has performed on the bridge project was 3.97 (satisfactory) smaller than 4.35 (satisfactory) building project.

In statistics, there was no significant difference (p> 0.05) between owner's expectation level and owner's satisfaction level to the foreman’s role on building project with p value 0.665. However, there
was a significant difference (p <0.05) between the owner's expectation level and the owner's satisfaction level with the foreman’s role on the bridge project with a value of p <0.001, where the owner's expectation level was 4.70 ("always" expected). That was bigger than the owner satisfaction level 3.97 (satisfactory).

Overall, there was a significant difference (p <0.05) between the owner's expectation level and the owner's level of satisfaction with the foreman’s role on the bridge project and the building project. The value was p 0.001, and the owner's expectation on the role of the foreman was 4.54 ("always" expected). That was bigger than 4.16 satisfaction level (satisfactory).

The owner's expectations on the foreman’s role were higher in the bridge project than in the building project. In this case, the foreman were more needed on the bridge project, because the process was more complicated than the building project. That was why it take an experienced foreman to work on a bridge that can perform his role as a foreman [12].

Based on Soemardi's previous research (2011), the contractor's results have high expectations on the role of the foreman with an average score of 4.49 whereas the average contractor's satisfaction scores on the lower mandor role is 3.14 [11].

Statistically, there was a significant difference between the owner's expectation level and the owner's satisfaction level with the foreman’s role on the bridge project. This was because the expectation of the foreman’s role in the bridge was higher than in the building, so the level of satisfaction on the bridge project was smaller than the project in the building [13].

Based on Figure 1 the interpretation of the Cartesian diagram can be explained as follows:

a. Quadrant A

This shows that the role attribute in the quadrant needs to be prioritized by the foreman, because this role is considered very important by the owner. On the other hand, the level of owner satisfaction on this role is still not satisfactory. The role attributes in this quadrant are the role of intermediaries / connectors, monitors, disturbance handlers, and resource allocators.

![Figure 1. Cartesian diagram at the expected level of role - level of implementation satisfaction to the foreman’s role](image-url)
b. Quadrant B
   The role attribute in this quadrant needs to be maintained, because in general the level of execution has been in accordance with the owner's frequency of expectations, so this can satisfy the owner. The role attributes in this quadrant are the leader, the role of the figurehead, the spokesman, and the "negotiator" (negotiator).

c. Quadrant C
   The role attribute that exists in this quadrant is considered less important to the owner. This is because the quality of the implementation is normal or sufficient. The role included in quadrant C is "entrepreneur" (Entrepreneurship).

d. Quadrant D
   The role attribute in this quadrant is considered excessive in its implementation. This is because the owner considers not too important but the implementation is done very well by the foreman, so it is very satisfactory. The role that is included in this quadrant is the role of information disseminator (disseminator).

3.5.2 Expectation level of the foreman's function based on owner - owner's satisfaction level in the implementation of the foreman's function

| Project                  | Foreman's expectation level | Foreman's satisfaction level | p value* |
|--------------------------|-----------------------------|------------------------------|----------|
| 1. Bridge x(SD)          | 4.68(0.20)                  | 4.12(0.33)                   | <0.001   |
| 2. Building x(SD)        | 4.51(0.32)                  | 4.48(0.24)                   | 0.717    |
| 3. Bridge and building x(SD) | 4.59(0.27)                  | 4.30(0.34)                   | 0.003    |

Description: *) Paired T Test

Based on table 10, The mean value of the owner's expectation level on the foreman's function of the bridge project was 4.68 ("always" expected). It was bigger than the building project value of 4.51 ("always" expected). While the average value of the owner's satisfaction level with the function that has been executed by the foreman on the bridge project was 4.12 (satisfactory). It was smaller than the 4.48 (satisfactory) building project.

Statistically, there was no significant difference (p > 0.05) between the owner's expectation level and the owner's satisfaction level with the foreman's function in the building project with p value 0.717. However, there was a significant difference (p < 0.05) between the owner's expectations level and the owner's satisfaction level with the foreman's function in the bridge project. The value was p <0.001, where the owner's expectation on the foreman's function was 4.68 ("always" expected). This was bigger than 4.12 satisfaction level (satisfactory).

On the whole, there was a significant difference (p <0.05) between the owner's expectations level and the owner's satisfaction level with the foreman's function in the bridge project and building project. The value was p 0.003. The owner's expectation on the foreman's function was 4.59 ("always" expected). That was bigger than the 4.30 satisfaction level (satisfactory). The owner's expectations on
the foreman's function were higher in the bridge project than in the building project. This was due to
the more needed foreman in the bridge project. Thus because the construction of the bridge project
was more complicated than the building project. Therefor an experienced overseer was required in the
work of the bridge which can perform its functions as a foreman [14].

Based on Soemardi's (2011) previous research, the contractor's expectation (4.57) on the function
performed by the foreman is also higher than the contractor's satisfaction level (3.07). The above study
concludes that the high expectation of the contractor on the role of the foreman's function, however, is
not in line with the fact that the contractor's satisfaction level remains low against the roles and
functions that the foreman has performed [11].

Statistically there was a significant difference between the owner's expectation level and the
owner's satisfaction with the foreman's function on the bridge project. That was because the
expectation of the foreman’s function in the bridge was higher than in the building. So, at the
satisfaction level of the foreman's function in the bridge project was smaller than the project in the
building [15].

Below is a cartesius diagram of the foreman's function frequency level with the owner's satisfaction
level on the function performed by the foreman:

![Cartesian Diagram Expectation Level of Foreman's Function - Satisfaction level for the Implementation of Foreman's Functions.](image)

Based on Figure 2 the interpretation of the Cartesian diagram can be explained as follows:

a. Quadrant A

In this study it indicates the foreman's function in this quadrant needs to be prioritized by the
foreman. This is because the presence of the foreman is very important for the Owner, while the
level of Owner satisfaction with the mandor function is still not satisfactory. From the matrix it
can be seen that there is no foreman’s function that is in quadrant A, so in this case there is no
priority to improve.

b. Quadrant B
In this research explains that the foreman’s function in this quadrant needs to be maintained. This is because the implementation has been in accordance with the Owner's frequency expectation level, so it can satisfy the Owner. From the matrix can be seen that the function of the foreman who is in quadrant B is the function of organizing (organizing). In this situation, the foreman establishes the components of the job required, divides the task, and assigns the authority to the worker to achieve the goal. The controlling function is the foreman comparing the actual results with the work plan and taking the necessary action.

c. Quadrant C
In this research, the C quadrant shows that the foreman’s function is considered less important to the Owner, while the quality of the implementation is normal or sufficient. The foreman’s functions included in the C quadrant is the actuating / executing function in which the foreman moves, fosters the spirit of the worker to work properly and guides the worker to carry out the work according to the plan in order to achieve the goal. The planning function is where the foreman plans the number of workers needed, plans the work steps, the material needs and the equipment to be used.

d. Quadrant D
In this study shows that the foreman’s function in quadrant D is considered excessive in its implementation. This is because the owner states not important. But, on the other hand the implementation is done very well by the foreman, so the result is very satisfactory. From the matrix it shows that there is no foreman’s function which is in quadrant D.

4. Conclusion
This research explains the roles and functions performed by the foreman as the manager of the workforce at the bridge and building project. In this study, it also shown about the level of owner’s satisfaction with the roles and functions performed by the foreman. From the results of research there are several suggestions that can be stated as follows:

a. Contractors, owners and workmans have a high level of expectation in the execution of foreman’s roles and functions. In that case, it is necessary to improve the ability of the foreman in carrying out the role and function as a manager in the workforce. In the same way, the satisfaction degree of contractors, owners and workmans on the implementation of the foreman’s role and function is still at a level quite satisfactory.

b. In this research, the foreman who has competence in the role and managerial functions of a foreman needs to be improved.

c. From the results of this study, some description of the foreman’s role and function can be used as an effective contracting mechanism for contractors in recruiting foremen.

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