Causes and Problem Identification in Construction Claim Management

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Abstract. The construction service industry is a sensitive and complex industry and has a fairly high construction uncertainty, related to the development of processes, methods, construction techniques, and the natural conditions factor in construction activities, and often result to claims. Claims can occur both from users or contractor due to perception differences from the initial agreement that has been stated in a construction contract. Construction claims appear as a result of problems in aspects of organization, planning, and contracts. A claim can be described as an administrative tool to correct failures that occur in the construction process. The application of good claim management will be able to avoid dispute that will have an impact on cost overrun and time overrun. This study aims to identify the factors that cause the occurrence of claims during the construction work and identify the problems in each claim management process. The study was conducted by collecting questionnaire data to respondents, practitioners from the owner, contractor and consultant. Data analysis was performed using qualitative analysis (descriptive analysis) to determine the highest score of respondents’ opinions regarding the causes of claims and problems that occur in each claim submission process so that an effective and efficient claim submission process is produced.

1. Introduction

In the success of a project, cooperation between interested parties is needed in the course of the project, these parties are the owner, consultant, and contractor, even the supplier. However, these parties have different interests and goals so that conflicts / disputes (disputes) often occur due to disagreements during project planning and development. The disagreements that occur can potentially lead to claims. The number of construction claims and disputes is increasing and is a burden in the construction industry. Therefore, it is necessary to apply a Claim Management which is the process of coordinating resources for progress of claims from identification and analysis through identification, notification, examination, presentation, documentation, negotiation and claim settlement [1]. Sensitivity to the fundamental factors in the claim identification process plays an important role in addition to skills needed in the management of said project. Since claims cannot be properly predicted, its prevention and detection efforts require a strong claim management. Changes in terms of project documentation setting from unregulated to a regular system will have a significant impact on these prevention and control efforts [2]. Most commonly arising construction claims are regarding time and costs as job impact changes; it is also the most difficult problems because changes do not only occur in one job, but also in the work that follows. Therefore, an effective claim management system is essential [3]. Without a system to resolve claims, a simple conflict can develop into a serious dispute affecting other aspects in other projects [4]. Claim management is a process of coordination among stakeholders for the purpose of assessing claims and resolving problems [5]. Claim management describes the processes required to
eliminate or prevent more construction claims and to respond quickly when a claim occurs. Claim management process consists of identifying and analyzing sub process claim management systems through claim notification, claim recognition, claim testing, claim documentation, claim examination, claim presentation, claim planning, claim negotiation, and claim execution [6,7].

2. Methodology
In this study there are 2 stages of data collection, first is to collect the causes of claims and second is to collect problems occur when claims are submitted. The research instrument consisted of a questionnaire that distributed to 30 respondents consisting of practitioners involved in the project such as the owner, contractor and consultant. The criteria for respondents used are practitioners with a minimum of 10 years experience in large-scale projects and minimum S1 education. The results of distributing the questionnaire were then processed using descriptive analysis with SPSS software.

3. Results
3.1 Reasons for Claims
The number of claims in construction projects is increasing and claims have become almost routine activities in projects. Claims can be caused by several factors and these factors can be used in the first stage of identification and prevention. Table 1 shows several reasons for construction claims. According to contractors, the number one main reason for claims is (i) Changes in owner's requirements. The second most cited reason is (ii) design changes from owner during the post-tender award stages while the third is due to (iii) project being implemented in short time period with inadequate site investigation, design works, tender and contract documents and (iv) inadequate definition and/or specification of the precise scope of contract works. The suggestions are that owners should ensure that the project is well planned from the beginning to minimize the need for change orders or change directives because changes in the contract work can increase the risk of construction claims and decrease work productivity.

| Reasons for Claims                                                                 | Mean Score | Rank |
|-----------------------------------------------------------------------------------|------------|------|
| Changes in owner's requirements                                                   | 4.67       | 1    |
| Changes of design from owner during the post-tender award stage                    | 4.38       | 2    |
| Project being implemented in short time period with inadequate site investigation, design works, tender and contract documents | 4.29       | 3    |
| Inadequate definition and/or specification of the precise scope of contract.       | 4.29       | 3    |
| Incomplete and/or uncoordinated design.                                           | 4.05       | 4    |
| Lack of clarity in the owner's requirements and/or inadequacy of the design brief.| 3.81       | 5    |
| Parties generally more aware of their rights and relatively more litigious.        | 3.67       | 6    |
| Changes arising out of statutory, local authority sources.                         | 3.67       | 6    |
| Employer's/contract administrator's failure and/or neglect to meet relevant contract obligations. | 3.38       | 7    |
| Sudden swings in economic and market conditions.                                  | 3.24       | 8    |
| Negative effects of political factors.                                            | 2.95       | 9    |
| Contracting environment relatively more competitive with a larger number of players and narrow profit margins. | 2.90       | 10   |
3.2 Problem in Claim Process

This section presents problems associated with claim management process Indonesia’s Construction Industry. These problems are concentrated into 5 stages of claim process: identification, notification, examination, documentation, presentation and resolution.

3.2.1 Identification

According to contractors, the mains problem in identification of claim is: (i) Lack of awareness of site staff to notice a claim; (ii) Insufficient contract knowledge by site staff; and (iii) Insufficient skilled personnel for detecting a claim as shown in Table 2. All three problems relate to staff’s skills and awareness. Staff are expected to understand contract provisions and obliged to read and assess them before the start the project.

| Problems in Claim Identification                                      | Mean Score | Rank |
|-----------------------------------------------------------------------|------------|------|
| Lack of awareness of site staff to notice a claim                     | 4.43       | 1    |
| Insufficient contract knowledge by site staff                        | 4.38       | 2    |
| Insufficient skilled personnel for detecting a claim                  | 4.10       | 3    |
| Poor communication between site and head office                      | 3.86       | 4    |
| Inaccessibility of documents used for identifying a claim             | 3.81       | 5    |
| Difficulties in detecting any problems during the work due to high workload | 3.76       | 6    |
| Insufficient time due to high workload                                | 3.33       | 7    |

3.2.2 Notification

In claim notification, the main problems arising are (i) Inaccessibility of supporting documents needed for notice; (ii) Poor communication/instructions to proceed with submitting the notice; and (iii) Insufficient time to thoroughly prepare the notice due to high workload as tabulated in Table 3. The notification process must be supported by relevant documents and submitted in writing as detailed as possible. Therefore, a good documentation system and accurate site records are very important prerequisites in notice preparation procedures. In addition, site staff must have good communication skills with all stakeholders.

| Problems in Claim Notification                                      | Mean Score | Rank |
|---------------------------------------------------------------------|------------|------|
| Inaccessibility of supporting documents needed for notice           | 4.48       | 1    |
| Poor communication/instructions to proceed with submitting the notice | 4.10       | 2    |
| Insufficient time to thoroughly prepare the notice due to high workload | 3.62       | 3    |
| Ambiguous procedures in notice preparation                          | 3.52       | 4    |
| Ambiguous responsibility as to who should prepare the notice        | 3.38       | 5    |
| No standard forms used for preparing the notice                     | 3.14       | 6    |
| Time in the contract is too short                                   | 2.86       | 7    |

3.2.3 Examination

The next process is the examination of claims. Table 4 shows that the main problems in examination are (i) Poor communication to gather the required information to analyze a claim and Ambiguous procedures for claim examination; (ii) Unavailability of records needed to analyze and estimate the potential recovery; and (iii) Lack of legal/contract to establish the base on which the claim stands as tabulated in Table 4. Respondents indicated that communication and procedure is clearly very important to analyse
claims. Contractors have to check the required files to estimate the claim’s cost by presenting documents to owners. Legal aspect/contracts can be strong reasons for the claim to stand in the examination process.

**Table 4. Problems in Claim Examination**

| Problems in Claim Examination                                                                 | Mean Score | Rank |
|-----------------------------------------------------------------------------------------------|------------|------|
| Poor communication to gather the required information to analyze a claim.                     | 4.05       | 1    |
| Unavailability of records used to analyze and estimate potential recovery.                     | 3.90       | 2    |
| Ambiguous procedures for claim examination.                                                    | 3.90       | 2    |
| Lack of legal/contracts to establish the base on which the claim stands.                       | 3.81       | 3    |
| No standard formula used to evaluate impacts and calculate damages.                            | 3.67       | 4    |
| No standard formula used to evaluate impacts and calculate damages.                            | 3.67       | 4    |
| Ambiguous responsibility as who should evaluate the amount of recovery.                        | 3.57       | 5    |
| Ambiguous responsibility as who should evaluate the amount of recovery.                        | 3.57       | 5    |
| Unrealistic formula used to calculate damages.                                                  | 3.43       | 6    |
| Insufficient time to thoroughly examine claim.                                                  | 3.14       | 7    |
| Insufficient computerized machines to facilitate the calculation.                               | 2.67       | 8    |

**3.2.4 Documentation**

The survey also shows (i) Some information/instructions not kept in writing; (ii) Inaccurate recorded information; and (iii) Ineffective record-keeping system as tabulated in Table 5. This part highlights contractors’ contribution to the problems in claim documentation. Project documentation must be prepared with the intention to build cases and written evidence to support arguments. If owners do not make written instructions, contractors should take the initiative to get proper written instructions from owner.

**Table 5. Problems in Claim Documentation**

| Problems in Claim Documentation                                                                 | Mean Score | Rank |
|-----------------------------------------------------------------------------------------------|------------|------|
| Some information/instructions are not kept in writing.                                         | 4.24       | 1    |
| Inaccurate recorded information.                                                               | 3.95       | 2    |
| Ineffective record-keeping system.                                                             | 3.90       | 3    |
| No standard forms used to record data during construction.                                     | 3.57       | 4    |
| Overdue in retrieving the needed documents.                                                    | 3.29       | 5    |
| Inaccessibility of documents when needed.                                                      | 3.14       | 6    |
| No computerized documentation system.                                                          | 3.00       | 7    |
| High cost associated with retrieving required information.                                     | 2.67       | 8    |

**3.2.5 Presentation**

With regards to presentation, the survey shows that (i) Poor communication in presenting a claim; (ii) Insufficient time to thoroughly prepare claims due to high workload; and (iii) Ambiguous procedures in the preparation of claim presentation are the major problems in claim presentation as tabulated in Table 6. In this process, completed documents will be presented to owners and it requires good communication between participants to make the preparation clear. They must be aware of the claim process and know how to present the claim and defend it well. If the contractors are having difficulties in identifying and hiring experienced staff, the presentation process will be adversely affected and possibly cause the owners to reject the claim.
| Problems in Claim Presentation | Mean Score | Rank |
|--------------------------------|------------|------|
| Poor communication in presenting a claim. | 4.10 | 1 |
| Insufficient time to thoroughly prepare claims due to high workload. | 3.62 | 2 |
| Ambiguous procedures in preparation of claim presentation. | 3.52 | 3 |
| Insufficient skilled staff in preparing a claim submission. | 3.43 | 4 |
| Ambiguous responsibility to prepare full report in claim presentation. | 3.43 | 4 |
| No standard format of a claim submission. | 3.38 | 5 |
| Inaccessibility of relevant documents to submit along with the claim. | 3.29 | 6 |

3.2.6 Resolution/Negotiation
Negotiation is the main method to achieve resolution as an agreement through discussions and compromises can resolve problems before they become a dispute. Resolutions by negotiations in claim management process need a justification stage. This survey indicated that (i) Disagreements arising during negotiation; (ii) Unsatisfactory evidence to convince other parties; and (iii) Poor negotiation skills are the problems during negotiation process as tabulated in Table 7. Successful negotiation of claim is an important element in controlling project cost and can reduce the potential for litigation.

| Problems in Claim Resolution | Mean Score | Rank |
|-------------------------------|------------|------|
| Disagreements arising during negotiations. | 4.33 | 1 |
| Unsatisfactory evidence to convince other parties. | 4.00 | 2 |
| Poor negotiation skills. | 3.81 | 3 |
| Adversarial relationships with other parties. | 3.52 | 4 |
| Inadequate time due to high workload. | 3.52 | 4 |
| Difficulty to settle without any litigation or arbitration. | 3.38 | 5 |

4. Conclusion
The research aimed to describe and explore issues and problems related to the process of claim from contractors’ point of view as categorized into six stages. The stages are claim identification, claim notification, claim examination, claim documentation, claim presentation and claim resolution (negotiation). The findings highlighted the need for project staff to have more knowledge and skills in handling claims, good communication between stakeholders in project implementation, and most importantly document completion and record keeping to provide evidence when submitting the claim. Other reasons for claims are change design by owners, and projects being implemented in short time period with inadequate site investigation, design works, tender and contract documents; therefore, contract strategies are essential to manage claims. From the study, it was found that the most common cause that lead to claim is a change requested by the owner, especially in the design aspect which lead to the overall project costs changes and lead to claims. The process of claim management process has a major problem in its implementation, namely:

i. Lack of awareness of site staff to notice a claim and Insufficient contract knowledge by site staff
ii. Inaccessibility of supporting documents needed for notice and Poor communication/instructions to proceed with submitting the notice.
iii. Poor communication to gather the required information to analyze a claim and Unavailability of records used to analyze and estimate potential recovery.
iv. Some information/instructions are not kept in writing and inaccurate recorded information.

v. Poor communication in presenting a claim and insufficient time to thoroughly prepare claims due to high workload.

vi. Disagreements arising during negotiations and unsatisfactory evidence to convince other parties.

Based on the results of these studies, it can be concluded that in carrying out claim management, there are many causes and problems that must be avoided so that claim management can run smoothly. Contract control, communication between stakeholders, record keeping or documentation and resolution/negotiation are mandatory and become a priority, so that the project runs in accordance with what is expected to meet good quality, efficient and timely so as to avoid cost and time overrun.

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