A Survey of Thai Contractors' Construction Claims and Claim Management

Kongkoon Tochaiwat[1,*] and Visuth Chovichien[2]
[1]Chulalongkorn University, Tel. 02-218-6459, kongkoon@hotmail.com
[2]Chulalongkorn University

Abstract

The substantially increasing number of construction claims indicates the need for the implementation of an effective construction claim management. This research aimed at surveying the frequencies and the severities of the occurrences of each type of construction claims, the contractors' claim management problems and improvement guidelines, as well as assessing the efficiencies of the contractor's organizations in managing their claims, which are classified into five sub-processes: 1) claim recognition and identification, 2) claim notification, 3) claim data collection, 4) claim analysis and pricing, and 5) claim negotiation. Three hundred construction companies from all parts of Thailand were selected and sent questionnaires. The data related to the frequencies, the severities (the level of the damages for each occurrence), the problems or comments, and the contractors' claim management efficiencies observed from this research could be used to solve or improve the contractors' claim management system.

1. Construction Claim Management

Construction claims are found in almost every construction project. They are the seeking of consideration or change by one of the parties involved in the construction process [1], thus creating significant effect to project cost and time. A survey done in Western Canada found that the majority of claims involved some delays and, in a lot of cases, delays exceeded the original contract duration by over 100%. As to the project cost, more than half of the claims were an additional cost of at least 30% of the original contract values [2]. Other research works done in the United States and in Thailand showed similar results that the average cost growth caused by claims was approximately 7% of the original contract value [3, 4].

1.1 Types of Construction Claims

There are a number of ways to classify construction claims. They may be classified by the related parties, rights claimed, legal basis, and characteristics of claims. By determining their relevant legal bases, construction claims can be divided into three categories [5]:

1) Contractual Claim

Contractual claims are the claims that fall within the specific clauses of the contract. In well-accepted standard contracts, there are a lot of provisions which entitle both the contractors and the owners to claim for appropriate compensation such as ground conditions, variations, late issue of information, and delay in inspecting finished work [6].

2) Extra-contractual Claim

This type of claims has no specific grounds within the contract but results from breach of contract terms that may be expressed or implied, e.g. the extra work incurred as a result of defective material supplied by the owner.

3) Ex-gratia Claim

Ex-gratia claims are the claims that there is no ground existing in the contract or the law, but the contractor believes that he has the rights on moral grounds, e.g. additional costs incurred as a result of rapidly escalated prices.

1.2 Construction Claim Management Sub-Processes

The construction claim management process consists of six sub-processes [7]:

1) Recognition and identification of change

Construction change recognition and identification involves "timely" and "accurate"

* Corresponding Author

RECEIVED 24 January, 2005
ACCEPTED 24 March, 2006

detection of a change. It is the first and critically important step of the claim process [8].

2) Notification of change

This sub-process involves alerting the other party of a potential problem in a manner that is non-adversarial. Time limit requirements are very crucial and critical [8]. Normally, the contract specifies such duties to both parties.

3) Systematic and accurate documentation of change

Records and documentation play a very important role in the settlement of claims. However, the importance of record management is not realized as much as it should be [9].

4) Analysis of time and cost impacts of change

The objective of this sub-process is to determine the impact of the change that occurred. The analyzer shall perform schedule analysis to calculate the time impact while break down the cost into various cost components to calculate the cost impact.

5) Pricing of change

The purpose of this sub-process is to give the other party in the contract a substantive description and detail of the extra costs incurred or to be incurred due to a change. This detailed cost description is necessary for understanding, negotiating, and justifying extra contract costs. There are two types of claim pricing: forward pricing and post pricing [7].

6) Negotiation of claim

This sub-process concerns the process of presenting claim to the owner, and mutual resolution of such claim. If an agreement cannot be reached and either party believes his position is correct, he should propose an alternative dispute resolution method. If this fails, the remaining choice is to take the matter to court.

2. Objective and Methodology

2.1 Objective:

The objective of this research was to find the frequencies and the severities of the occurrences of each type of contractors' claims, the efficiency of the contractors' organizations in managing their claims in each sub-process, and the contractors' claim management problems and improvement guidelines.

The claim's severity is defined as the level of damage for each occurrence of claim event.

2.2 Methodology:

Having contemplated the level of availabilities of each required data, the required data were collected by a questionnaire survey. There were four parts in the questionnaire:

1) The first part contained the questions related to the respondents' data such as their position, their working experiences, and their maximum experienced contract value. These data was used in screening the unqualified respondents. The contract value of 20 million baht, converted from the equivalent dollar amount recommended by the Federation of Consulting Engineers for screening big-sized projects and from medium-sized projects [10], was used as a threshold.

2) The second part contained thirty questions related to the frequencies and severities of thirty causes of the contractors' claims, i.e. owners' late activity of site access, owners' breach of contract, or owner-caused damages occurring to their contractors, covering all three types of claims. Each respondent was asked to approximate the number of occurrences per project for each cause of claim in each question. On the other hand, the severity of each cause was assessed by using five-leveled Likert-Scaled question [11].

3) The third part contained nine five-leveled Likert-Scaled questions related to the contractors' abilities to manage their claims, acquired by analyzing the numbers and the similarities of the contractors' tasks for each sub-process and for each party (the contractor and the owner) who files the claim: (1) recognition and identification of the contractors' changes, (2) notification of the contractors' changes, (3) performing systematic and accurate documentation of contractors' changes, (4) performing analysis of time and pricing contractors' changes, (5) negotiating contractors' claim,

(6) recognition and identification of owners' changes (against contractors), (7) performing systematic and accurate documentation of owners' changes (against contractors), (8) performing analysis of time and pricing the owners' changes (against contractors), (9) negotiating owners' claim (against the contractors).

4) The fourth part is an open-end question asking the respondents to inform the problems or the recommendations related to their claim process.

After preparing the questionnaires, three hundred contractors were then selected by using stratified sampling technique [12], taking account of their locations (Bangkok, Bangkok Vicinity, Central Part, Northern Part, North Eastern Part, and Southern Part). The criterion used in classifying the locations was adopted from that of the National Statistical Office, which groups the Eastern Part and the Western Part with the Central Part [13].

3. Characteristics of the Respondents

Out of 300, there were 32 questionnaires returned to the researchers. The composition of their locations is comparable to the composition of the contractors nationwide [13], as shown in Fig.1 and Fig.2, respectively.

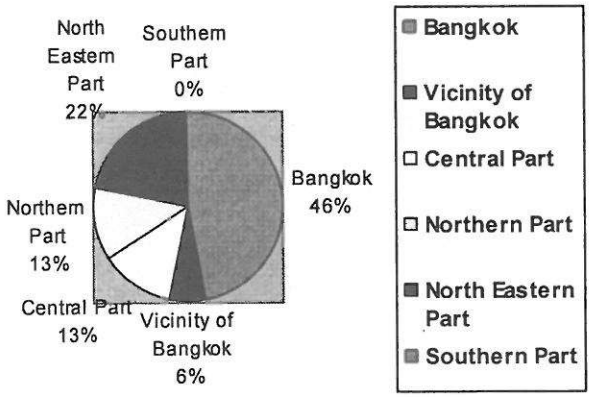


Fig.1 Composition of Respondents (by Locations)

From Fig.1 and Fig.2, it can be seen that the compositions of the respondents from vicinity of Bangkok, Central Part, Northern Part, and North Eastern Part were close to those of the contractors nationwide. However, the composition of Bangkok and Southern Part were clearly different from those of the population. There was no questionnaire returned from the contractors in the Southern Part in this research while the questionnaires collected from Bangkok were much more than those of the population.

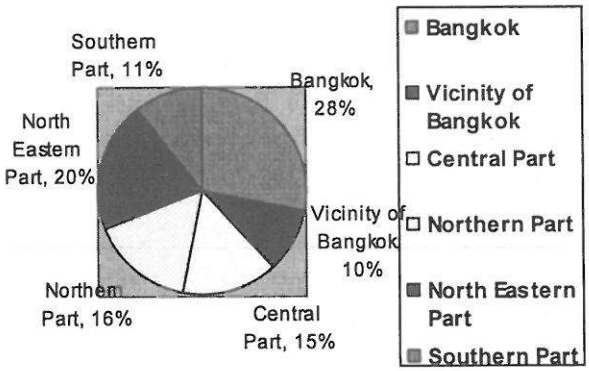


Fig.2 Composition of Contractors Nationwide (by Locations)

The average maximum contract value and the average years working with claims showed that the respondents, in average, have high experiences and qualifications.

4. Frequency and Severity of Each Type of Claims

Table 1 shows the frequencies and severities of the contractual claim, extra-contractual, and ex-gratia claim.

1) Column 2: The average frequencies of the contractual, extra-contractual and ex-gratia claims occurring in one project can be calculated from summation of all average numbers of occurrences per project of all their sub-types (each question in the questionnaires), collected from the questionnaires.

2) Column 3: The frequencies in (2) were multiplied by $\frac{10}{94.19}$.

3) Column 4: Severity Index of each type of claims was calculated by determining the average of all average severities of each sub-type (each question in the questionnaires).

4) Column 5: Severity Score for each type of claims was calculated by changing the denominators of the Severity Indices (column 4) from 4 to 10.

Table 1 Frequencies, Severities and Impact of Claims

Type of Claims	Frequency		Severity		Impact Score (from 10)
	Times per Project	Score (from 10)	Index	Score (from 10)	
(1)	(2)	(3)	(4)	(5)	(6)
Contractual	69.08	7.33	2.91	7.28	5.34
Extra-contractual	21.01	2.23	2.80	7.00	1.56
Ex-gratia	4.10	0.44	3.14	7.85	0.35
Overall	94.19	10.00	2.90	7.25	7.25

5) Column 6: The Impact Score of each type of claims is equal to one-tenth of the product between the Frequency Score (column 3) and the Severity Score (column 5). Since both frequencies and severities of the claims have high level of effect to the project, the Impact Scores, which take account of both of them, should be used in determining the impacts of the claims on a construction project.

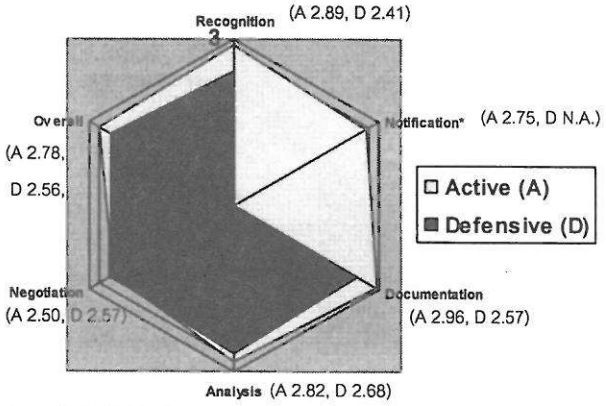
From Table 1, it can be clearly seen that the contractual claim has the highest frequency (score 7.33 from 10) and impact (score 5.34 from 10). The 7.33 Frequency Score shows that the contractual claim has contribution of 73.3% or about three quarters of the overall claims occurred in one project. This emphasizes the importance of good preparation of the construction contract at the beginning of the project. The well-prepared construction contract can help both the project owner and the contractor settle the changes that occurred before they become claims or disputes, which consume more time and cost from both parties to solve.

On the other hand, the extra-contractual claim also has high level of effects on the project, which can be seen from its Frequency Score (2.23 from 10) and its Impact Score (1.56 from 10). This implies that the contractors need to be familiar with the law, regulations, and other standards of works related to the work as much as to deliberately scrutinize the contract documents. This helps the contractors efficiently avoid or settle the changes that occurred.

The ex-gratia claim got the lowest Frequency Score (less than 1 from 10) while it had the highest Severity Score (7.85 from 10). This implied that even if ex-gratia claims occurred not so often in the project, the contractors felt they have high level of impact to their performances. This finding was supported by the fact that some respondents informed the researchers that their project owners sometimes asked them to do some works out of the original scope of the contracts. These contractors also informed that they had to accept these requests because of the need of future works.

5. Contractors' Claim Management Efficiencies

The contractors' Efficiency Indices of every task of contractors' claim management sub-processes and of the overall efficiency are shown in Fig.3.



Remark: * Defensive Notification of Change Efficiency neglected

Fig.3 Contractor Claim Management Efficiency

Efficiency Index, which represents the efficiency of all sampled contractors, can be calculated by averaging all the respondents' answers in Part 3 of the questionnaires (in

Likert Scale of 0 – 4) for each question asking how well their organizations can manage construction claims in each sub-process of claim management.

The efficiency of the contractors in performing defensive notification of the change tasks can not be assessed because there is no activity the contractors have to perform in the process of being notified by their owners.

From Fig.3, the active tasks that the contractors can perform well (better than the overall efficiency index) consist of (1) recognition and identification of change, (2) systematic and accurate documentation of claim, and (3) analysis of time and cost impacts of change, while the defensive ones are the systematic and accurate documentation, and analysis of time and cost impacts of the change.

On the other hand, the activities that the contractors can not perform well (worse than average) and should be improved are: (1) active notification of change, (2) active negotiation of claim, and (3) defensive recognition and identification of change.

When comparing the active and the defensive efficiencies, the contractors seem to be able to perform better in claiming against the owners than defending themselves from being claimed. The probable reason of this finding is that the contractors become aware of the active claims prior to the owners and had better access to the data required in managing these claims. However, the respondents rated their abilities to negotiate the owners' claims against them better than their abilities to negotiate the claims against the owners. This was in accordance with the problem notified by some respondents about their low bargaining ability to negotiate with their owners.

6. Problems in the Processes and Suggestions

Ten problems and seven suggestions related to the contractors' claim management processes were identified from the questionnaires, as shown in Table 2 and Table 3, respectively. It should be noted that because of the small number of respondents, the problems and suggestions acquired should be used carefully.

Table 2 Problems of the Contractors' Claim Management

No.	Problem Description	Frequency
1.	Incomplete Contract Documents	3
2.	Much Higher Bargaining Ability of the Owners	3
3.	Delay of the Engineer's Response	3
4.	Owners' Lack of Construction Knowledge	2
5.	Partiality of the Engineer	2
6.	Contractors' Lack of Contract Management Skill	1
7.	Insufficient Contractual Compensation	1
8.	Change Order without Clear Agreement	1
9.	Too Bureaucratic Procedure	1
10.	Corruption	1
	Total Frequency	18

Table3 Suggestions about the Contractors' Claim Management

No.	Suggestion	Frequency
1.	Carefully Review Contract Documents	2
2.	Enhance Cooperative Atmosphere	2
3.	Systematically Collect Required Data	2
4.	Promptly Notify the Owner Entitlement to Claim	1
5.	Sign Separate Contract for Large-Amounted Variation Order	1
6.	Improve the Related Law, Regulations, and Standards	1
7.	Establish the Claim Settlement Organization	1
	Total Frequency	10

From analyzing the collected problems, it was found that there are three important causes

of the problems: engineers or consultants, owners and contract documents. The engineers play the key role in a construction project. They are the owners' representatives while working as independent professional [14]. The engineer's partiality problem always occurs when such impartiality can damage their owners, who pay the remuneration to them. The engineers have authorities to make determination and to issue the variation order. Sometimes, the contractors face difficulties because of the engineers' late or unilateral exercising of these powers.

Between parties, owners seem to prevail over contractors. The contractors in Thailand are likely to follow owners' or engineers' instructions, even though they think such instructions are incorrect or unfair, because they want to get the contracts from these owners in the future. Some owners who lack the construction knowledge or possess too bureaucratic contract management process can put the contractors in difficult situations. A respondent cited the corruption as a serious problem of Thailand construction industry.

The construction contracts have great contribution to the contractors' performances in construction. Incomplete contract documents lead to claims and disputes. Some contracts do not fairly allocate risks between owners and contractors. In addition, some contractors accepted that they did not have enough contract management skill.

As to the respondents' suggestions, the contractors can increase their claim management efficiencies by deliberately scrutinizing the contract provisions, enhancing the cooperative atmosphere among all parties, establishing the good claim management data collection and documentation, promptly notifying to the owners the event that change their statuses, and signing another separate contract for the large-amounted variation order. Some contractors suggest the government to help them by improving the relevant laws, regulations and standards and establishing the claim settlement organization.

7. Conclusion

The frequency, severity and impact of each type of claims can help contractors realize the priorities of the claims they should pay attention to. The contractors' claim management Efficiency Index of each sub-process informs the contractors their weak points and strong points. The contractors can use the problems and suggestions presented as a checklist to analyze and improve their organizations.

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