MITIGATING CLAIMS THROUGH CONFLICT AVOIDANCE IN CONSTRUCTION INDUSTRY

H.D. Sendanayake^{*}, P.A.P.V.D.S. Disaratna and M. Francis Department of Building Economics, University of Moratuwa, Sri Lanka

ABSTRACT

Conflict is defined as a serious disagreement or argument about something important between parties. When there are differences, incompatibilities in interests among parties involved, it is obvious a conflict could be exist. Construction industry is a place where the conflicting situations arise very often and it continues to act as a high explosive character. When a conflict is not managed properly it will lead to claims and if these claims are not clearly resolved the claims may turn into disputes.

This study explored how to avoid conflicts in construction projects by addressing their types, causes and effects. Moreover the types and causes of claims were also addressed. The aim of the study was to develop a framework as a strategy that could reduce effectively the occurrences of conflicts to mitigate claims in construction projects in Sri Lanka. As a means to achieve the aim of this research, the study was structured into two main parts; the first part aimed at mapping up the nature of conflicts in construction projects by establishing types of conflicts, critical symptoms of conflicts, factors causing them and the strategies used in avoiding the conflicts. Moreover types of claims and causes of claims were also investigated. This was done through the literature synthesis. Secondly, a collection of data was done through a questionnaire survey and expert interviews.

Through the analysed data the framework for conflict avoidance to mitigate claims has been created for the Sri Lankan context. Notwithstanding, it can be recommended to use for the construction industry as a whole. The study provides field level experiences from which the inexperience construction site professionals could learn the instances of conflicts and claims and not repeat the mistakes in their projects.

Keywords: Claims; Conflicts; Construction Projects; Sri Lanka.

1. INTRODUCTION

Conflict is defined as a serious disagreement or argument about something important between people. When there are differences, incompatibilities in interests among parties involved, it is obvious a conflict can be exist (Kumaraswamy, 1997; Fenn *et al.*, 1997; Chou and Yeh, 2007; Lee, 2008). Although the conflict is defined as an incompatibility of goals or values between two or more parties in a relationship, combined with attempts to control each other, conflict is not actually being a bad thing. Conflicts should be there for a certain extent to keep meaningful interactions among people. Existence of conflicts would create new thoughts, innovative ideas, methods, and productive ways of management (Fisher, 2000; Acharya *et al.*, 2006; Ohbuchi and Suzuki, 2003). However, the way or method of the conflict is being handled, is deciding whether the conflict is going to be constructive or destructive. A conflict is not always a negative situation. Rather it can also create a positive impact for the situation as well (DeChurch *et al.*, 2007; Ohbuchi and Suzuki, 2003). Construction industry is a place where the conflicting situations arise very often and it continues to act as a high explosive character (Acharya *et al.*, 2006).

Claim is basically a term for assertion for additional compensation in terms of time and cost in relation to change in the contract or assertion of right to property or money (Kumaraswamy, 1997; Jayalath, 2013). Ren *et al.* (2003) pointed out that inefficiently handled claims may lead to disputes and when these conflicts are not being managed and mishandled, the conflict may grow as a dispute. Accordingly, when a

^{*} Corresponding Author: E-mail - hasarads@gmail.com

conflict is not managed properly it will lead to claims and if these claims are not clearly resolved the claims may lead to be disputes (Acahrya *et al.*, 2006; Kumaraswamy, 1998; Fenn *et al.*, 1997). Therefore, it seems it is better to avoid conflicts in initial stages before they grow. It is a silkier way to face the disagreements in the initial stages rather than they get overgrown and difficult to be resolved.

The aim of the research was to develop a framework for conflict avoidance in order to minimize claims in the construction industry. This paper initially provides a comprehensive literature review in order to identify the prevailing knowledge about the conflicts and claims in the construction industry. Then the findings were further subjected to a discussion. Finally, conclusions are drawn from the findings.

2. **DEFINITION OF A CONFLICT**

Popovic and Hocenski (2009) and Acharya *et al.* (2006) stated that conflict can be defined as a struggle or contest between people with opposing needs, ideas, values, beliefs or goals. In the same way, Fisher (2000) pointed out that the conflict is an incompatibility of goals or values between two or more parties in a relationship combined with attempts to control each other's feelings. So that, conflict can be identified as, incompatibility of goals or ideas between two or more parties in a simpler meaning. Conflicts can be occurred between all kinds of relationships and social settings. However, according to Acharya *et al.* (2006) if there is a perfect construction world the conflicts may not be existed. But there is no perfect construction world. So it is obvious during the construction process conflicting situations may arise.

Tjosvold (2006) stressed that, conflicts can be either constructive or destructive but definitely need proper management. It is important to consider about destructive conflicts rather than productive conflicts since they disturb the successful completion of the construction project. However, having a conflict among people may lead to meaningful interactions among people and this situation may create success of the project.

2.1. TYPES OF CONFLICTS AND CAUSES OF CONFLICTS

Various researchers have found that there are many types of conflicts and these conflicts are happening due to various reasons. Acharya *et al.* (2006) expressed that there are five main types of conflicts and the reasons / sources of those conflict types. They are;

Owner Evoked Conflicts (OEC) – confusing requirements of owner, excessive change orders, supremacy of owner/consultant, project scope definition not clear, site access delays, lack of space in construction site, financial failure of owner, unbalanced risks, owner furnished material, delay in decision by owner, late handover of construction site, owner-furnished equipment and delay in running bill payment.

Consultant Evoked Conflicts (CEC) – defective design, errors and omissions in design, excessive extra work, differing site conditions, excessive quantity variations and specification related work.

Contractor Evoked Conflicts (COEC) – financial failure of contractor, slow work of contractor, incompetent contractor, major defects in maintenance, local people interruptions/protests, subcontractor inefficiency, non-payment to subcontractors, mentality of contractor and defective construction (quality)

Third Parties Evoked Conflicts (TPEC) – change in government codes, labour disputes/union strikes, adverse weather, market inflation, public disorder and third party delays

Other Project Matter Evoked Conflicts (OPMEC) – conflicts in documents, change order negotiation, issues of security of construction site, lack of communication, accident/safety, labour, equipment, material shortage, interpretation of escalation/de-escalation, necessity of environment improvement, negligence or negative attitudes of project participants and environmental hazards.

Jaffar *et al.* (2011) discovered that there are three main causes of conflicts. They are behavioral problems, contractual problems and technical problems. Behavioural problems include human interaction, personality, cultures and professional background among project team. Other issues in human behaviour such as individual's ambition, frustration, dissatisfaction, desire for growth, communication and level of power, fraud and faith are also causes of conflicts. Absolutely construction is not science, it is an art. So, construction is based on the people and understanding the people may help to successfully face the

behavioural problems. Contractual problems include variation, extension of time, payment, quality of technical specifications, availability of information, administration and management, unrealistic client expectation and determination. Actually construction process is going on with various contractual agreements for exchange of services and the money. So that to solve the contractual problems the law can be used. The technical problems include basically the engineering clarifications. To solve such types of problems altering the methods, environment, duration or conditions can be taken place.

2.2. EFFECTS OF CONFLICTS

Tjosvold (2006) argued that conflicts are not always destructive. They can be constructive as well if they are well managed. Tjosvold (2006) further stated that neither conflicts just happen nor escalate by themselves. It is people who involve in the conflict situation make choices which escalate conflict or lead to more constructive outcomes. Similarly Popovic and Hocenski (2009) explained that conflicts can provide beneficial results. Fisher (2000) stated that the way in which conflict is handled decides whether the ultimate result be constructive or destructive. Therefore, it can be said that constructive conflicts fertilizes for thought to the professionals and derive creative solutions and enhance the project success whereas destructive conflicts create complicated situations which weaken the stability of project progress.

The ultimate result of unmanaged conflicts will be disputes which require expensive dispute resolution with a lot of wastage of time, money and energy. Yiu and Cheung (2005) explained that if the level of conflicts escalates continuously, it may become psychological struggles between the contracting parties and manifests as disputes and the unfortunate outcomes will be loss of productivity and increase in cost of construction.



Figure 1: Conflict, Claim and Dispute Continuum Model Source: Acharya *et al.* (2006, p.545)

According to Adnan *et al.* (2011) conflicts may come up with several serious effects such as delays in development of the project, reduction of requirements due to unavailability of enough time, reduced performance of employees and broken professional relationships.

It can be seen that effects of unmanaged conflicts might cause a devastating damage to the construction project. Therefore, it is very important to provide a good attention to any type of conflict, even if it has the slightest effect on the project, before it destroys the successful completion of the project.

According to Figure 1 it is clear that the unresolved conflicts are causing claims. It is rather important to have a handsome knowledge about claims and their characteristics for the clarification of the relationships between conflicts and claims.

3. WHAT IS A CONSTRUCTION CLAIM?

Chappel *et al.* (2005) stated that a claim can be defined as the assertion of a right, usually by the contractor, to an extension of the contract period and to payment arising under the express or implied terms of construction contract. Similarly, Jayalath (2013) expressed that a claim is basically an assertion for additional compensation in terms of time and/ or cost in relation to a change in the contract or

otherwise. Jayalath (2013) further stated that there is no universally adoptable definition for the word claim. There is no stereo-type formula for it, but certain elements must be present. Basis for a good claim provide evidence for how it is being arisen, under what grounds it is claimable, duration of the effects in monetary terms, the quantities and rates applicable.

3.1. TYPES OF CLAIMS

According to Kumaraswamy (1997) there are two main types of claims. The constructions claims may arise as assertion for time or money. Simply claims for extra time and claims for extra money. Chappel *et al.* (2005) explained that there are four main categories of the claims and they are;

- *Contractual Claims* These types of claims are arising out of the express provisions of the particular contract. Most of the standard forms of contracts provide the facility to the contractor's right to seek damages.
- *Common Law Claims* These types of claims are claims for the damages for breach of contract under common law or legally enforceable claims for breach of some other aspects of law.
- *Quantum Meruit Claims* These types of claims are providing a remedy where no price has been agreed.
- *Ex-gratia Claims* These types of claims are which the employer is under no legal obligation to meet. That means the compensations are paid on ground of hardship or sympathy.

However, there are reasons and causes for the occurrence of claims. It is important identification of the causes of claims as well as identification of the relationships among conflicts and claims.

3.2. CAUSES OF CLAIMS

Kumaraswamy (1997) identified ten major common causes of construction claims. Those are ranked in descending order for overall perceived significance and they are; inaccurate design information, inadequate design information, inadequate site investigations, slow client response (decisions), poor communications, unrealistic time targets, inadequate contract administration, uncontrollable external events, incomplete tender information and unclear risk allocation.

4. **CONFLICT AVOIDANCE STRATEGIES**

Conflict avoidance is used to avoid conflict before it occurs rather than managing it after it occurs. Hence using the conflict avoidance strategies will be more useful for construction industry. According to Pathmapperuma (2013) there are five major dispute avoidance strategies. In such a way those similar strategies can be used as the conflict avoidance strategies. In case they can be identified as, clarity of scope, early, contractor involvement, equitable sharing of risks, open communication, collaboration, team work and relationship among parties and early notification and resolution of issues.

Therefore not only the understanding of conflict avoidance strategies but also a clear understanding about the occurrence, sequence and types of conflicts is important in conflict avoidance. The importance of preparation of a framework comes to the stage with that need of gaining knowledge about conflicts in construction industry.

5. **Research Method**

The approach undertaken for this research comprised of a literature review and data collection through questionnaire survey and expert interview. Firstly a comprehensive literature survey was carried out through journals, books, articles, reports, government publications, dissertations, previous research investigations and internet to identify the basic facts and the theories already subjected to discussion about conflicts and claims in construction industry. The expert interviews were carried out to get the general opinions about literature findings and through the questionnaire survey the ranking of the findings were done.

Under this research two methods were used for analysis in case of combining the collected data under two categories namely significance and occurrence of the factors. So that median of the answers calculated for significance and the RII value of the answers of occurrence has been calculated and a new risk index has been created by using those two.

• Created risk index formula,

Average significance (Median) x Probability of occurrence (RII) = Risk Index (Eq: 01)

According to the research the average value of the answers of the respondents were needed to calculate the significance (impact) and extreme answers should be disregarded. In that case, the best method to calculate average is the median for the discrete data. Relative Important Index (RII) was used as the analysis technique of quantitative data under the category occurrence. RII value represents the probability of the factor.

6. **RESEARCH FINDINGS AND DATA ANALYSIS**

Main five types of conflicts established from literature synthesis and interviews were ranked using the questionnaire survey findings. The main categories are owner evoked conflicts, consultant evoked conflicts, contractor evoked conflicts, third party evoked conflicts and other project matter evoked conflicts. Under those main five types the sub related conflict types were categorized. The major owner evoked conflicts were unclear project scope definition, excessive changing orders, delay in decision by owner, financial failures of the owner and delay in running bill payments. Major consultant evoked conflicts were excessive extra work, errors and omissions of the design, defective designs, excessive quantity variations and differing site conditions. Major contractor evoked conflicts were financial failures of contractor inefficiency, incompetent contractor and non payment to subcontractor. Major third party evoked conflicts were adverse weather conditions, inflation, third party delays, local people interruptions, change in government codes and labour disputes. Major other project matter evoked conflicts were change order negotiations, shortage of resources, lack of communication, environmental hazards and conflicts in documents.

Main three causes of conflicts were established from literature synthesis and they are behavioural problems, contractual problems and technical problems. Under those main three types the sub related causes of conflict are categorized and ranked in the data analysis step. According to the analysis major behavioural causes were communication, faith and fraud, individual ambitions, human interactions and personality. Major contractual problems were extension of time, variation, payments, quality of technical specifications, and availability of information. The major technical problem was engineering clarifications.

The identified claim types from the literature synthesis were divided in to two main categories namely claims for extra time and claims for extra money. Contractual claims, common law claims, *quantum meruit* claims and ex-gratia claims can be categorized under those main two categories, because each and every claim category identified can be divided in to claims for extra money and extra time.

Purpose of adding these causes of claims for the research is to provide a comparison and validation for the findings and prove that the claims in construction industry occur befitting to the conflicts. According to the data analysis change or variation orders, delay caused by contractor, incomplete tender information, inadequate design information and low price of contract due to high competition can be identified as the major causes of claims.

The major effects of conflicts ranked accordance with the data analysis were time overruns, unavailability of time, delay the development of the project, costly dispute resolution methods and break professional relationships.

According to the data analysis the major conflict avoidance strategies were early notification and resolution of issues, clarity of the scope and contract, open communication, collaboration, team work and relationship among parties, early contractor involvement and equitable sharing of risks.

7. **DISCUSSION**

Both literature review and findings confirm that the identified types and causes of conflicts, types and causes of claims, effects of conflicts and strategies to avoid conflicts compatible with each other. However the ranking of the analyzed data can be used to support the framework prepared to avoid conflicts in order to mitigate claims in Sri Lankan construction industry.

The final outcome, the framework to avoid conflicts in construction projects in Sri Lanka which was developed based on the findings of the research study is illustrated in Figure 2. A five stage process to avoid construction conflicts includes in the framework and those are establish context, identify potential conflicts, analyse potential conflicts, evaluate potential conflicts and treat the causes of conflicts.





As the first step establish the context of the project should be done. For that the internal and external details about the specific project should be identified. As the external details business environment, social environment, regulatory bodies, culture and political environment can be identified. On the other hand internal stakeholders, scope, size, goals and objectives of the project and purpose of project should be identified as the internal details. The second step is identifying potential conflicts. In that step types of conflicts, causes of conflicts, types of claims and causes of claims related to the construction project should be identified under analyzing the potential conflicts step. Comparing, evaluating and setting priorities of the identified findings should be done under the fourth step evaluate potential conflicts. Finally, for treating the causes of conflicts in a comprehensive manner, implementing the appropriate conflict avoidance strategies should be done. Throughout above five steps communication and consultation regarding the progress of each step to all relevant project team members should be done while monitoring and reviewing the process.

The framework was created as a generic framework and not specified for a special type of project. So the final framework can be used for the construction industry as a whole. Though the research findings were based on Sri Lankan construction industry rankings of the analysed data only can be used for Sri Lankan construction projects. However the framework can be used as a generic guide for mitigate claims through conflict avoidance in any construction project.

8. CONCLUSIONS

In order to mitigate claims which arise due to conflicts the conflict avoidance framework can be used successfully. The data was collected and analysed by using the literature survey findings. Those analysed and ranked data can be used to support the prepared framework.

However the research was done only to prepare the framework to avoid conflicts in Sri Lankan construction industry. But after the preparation of the framework the researcher identified that the framework can be used not only for Sri Lanka but also for the construction industry as a whole. But the rankings of the factors may be different with the nature and the environment of the country.

9. **REFERENCES**

- Acharya, N.K., Lee, Y.D. and Im, H.M., 2006. Conflicting Factors in Construction Projects: Korean Perspective. *Engineering, Construction and Architectural Management*, 13(6), 543-566.
- Adnan, H., Shamsuddin, S.M., Supardi, A. and Ahmad, A., 2012. Conflict Prevention in Partnering Projects. In: *Asia Pacific International Conference on Environment-Behaviour Studies*, 2011. 772-781.
- Chappel, D., Sims, J. and Smith, V.P., 2005. Building Contract Claims. 4th ed. UK: Blackwell publishing.
- Chou, H.W. and Yeh, Y.J., 2007. Conflict, Conflict Management and Performance in ERP Teams. *Social Behaviour and Personality*, 35(8), 1035-1048.
- DeChurch, L.A., Hamilton, K.L. and Haas, C., 2007. Effects of Conflict Management Strategies on Perceptions of Intragroup Conflict. *Group Dynamics: Theory, Research, and Practice*, 11(1), 66-78.
- Fenn, P., Lowe, D. and Speck, C., 1997. Conflict and Dispute in Construction. *Construction Management and Economics*, 15, 513-518.
- Fisher, R.J., 2000. Sources of Conflict and Methods of Conflict Resolution [online]. Available from: <u>http://www.ulstergaa.ie/wp-content/uploads/coaching/team-management-2012/unit-3/sources-of-conflict-and-methods-of-resolution.pdf</u> [Accessed 10 May 2013].
- Jaffar, N., Tharim, A.H.A. and Shuib, M.N., 2011. Factors of Conflict in Construction Industry: A Literature Review. In: 2nd International Building Control Conference 2011 [online], 193-202. Available from: <u>http://www.science direct.com</u> [Accessed 10 May 2013].
- Jayalath, C., 2013. Arguing Construction Claims. Sri Lanka: S. Godage and Brothers (Pvt) Ltd.
- Kumaraswamy, M.M., 1997. Conflict, Claim and Dispute in Construction. *Engineering, Construction and Architectural Management*, 4(2), 95-111.

- Kumaraswamy, M.M., 1998. Consequences of Construction Conflict: A Hong Kong Perspective. Journal of Management in Engineering, May/June, 66-74.
- Lee, K.L., 2008. An Examination between the Relationships of Conflict Management Styles and Employees' Satisfaction. *International Journal of Business and Management*, 3(9), 11-25.
- Ohbuchi, K. and Suzuki, M., 2003. Three Dimensions of Conflict Issues and their Effects on Resolution Strategies in Organisational Settings. *The International Journal of Conflict Management*, 14(1), 61-73.
- Pathmaperuma, P.K., 2013. Framework to Avoid Disputes in Public Sector Construction Projects in Sri Lanka: The Client's Perspective. Unpublished Dissertation (B.Sc.). University of Moratuwa, Moratuwa.
- Popovic, K. and Hocenski, Z., 2009. *Conflict Management* [online]. Available from: http://www.slideshare.net/KresimirPopovic/conflict-management-11488705 [Accessed 10 May 2013].
- Ren, Z., Anumba, C.J. and Ugwu, O.O., 2003. The development of a Multi-Agent System for Construction Claims Negotiation [online]. Advances in Engineering Software, 34, 683-696. Available from: http://www.sciencedirect.com [Accessed 10 May 2013].
- Tjosvold, D., 2006. Defining Conflict and Making Choices about its Management Lighting the Dark Side of Organisational Life. *International Journal of Conflict Management*, 17(2), 87-95.
- Yiu, K.T.W. and Cheung, S.O., 2005. A Catastrophe Model of Construction Conflict Behaviour. *Building and Environment*, 41, 438–447.