

Disruption Claims in Sri Lankan Construction Industry

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ABSTRACT

'Claims' are common phenomena in construction. Among those claim situations, disruption is a very complex claim situation which is notoriously difficult to prove. In general there is no significant disruption claim practice in Sri Lanka. When a contractor is not compensated for a cost he is entitled for under the contract, an unfavourable status quo is given birth that the contractor would look for alternative means, such as spurious claims, to recover his cost. Therefore, a proper practice of disruption claims is a necessity. Thus the research was aimed to identify the reasons for poor disruption claims practice in Sri Lanka, in order to contribute the necessary knowledge to eliminate the above problem. First part of research tested the level of current knowledge of the key players in claims in the industry through an experimental study. Leading professionals dealing with contractual claims representing twelve contracting organizations participated in it. It was then supported by an exploratory element carried out through interviews among them and followed by a documentary survey within the respective organizations to review the site level document practice and associated problems. Fifteen factors are identified to lessen the occurrence of disruption claims while entitled disruptions do exist. Among them insufficient knowledge on disruption claims, was the dominant factor and interestingly most other factors were directly linked to it.

Keywords: Construction Industry, Disruption Claims, Sri Lanka.



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1. INTRODUCTION

Disruption claims are known to be difficult to analyse and prove. However, they are a type of authentic right arising out of building contracts. There has been evidence that Sri Lankan contractors rarely claim for disruption. Since disruption is an unexpected additional cost to the contractor, that being not recovered would lead the contractor to recover those costs through alternative means such as spurious claims and reduced quality of work. Thus it would lead to adversarial context among project team. Therefore it is important to identify the reasons for poor practice of disruption claim in order to improve it to an acceptable level.

2. BACKGROUND

Construction is a unique industry due to it being a fast moving, complex and dynamic process. Due to its nature, "claims" are an inevitable burden in implementing today's construction projects. In any construction project, significant additional costs are usually experienced by contractor, owner, or the both.

A claim is a request or demand made by one party on the other to do or forgo doing some act that the claimant declares is owed as a matter of right (Chappell *et al.*, 2005). In the construction process there is a variety of actions and types of representations that are said to be claims. Basically there are owner direct claims and contractor direct claims.

Delay and disruption claims are categorized under contractor direct claims and considered as most complicated and difficult to analyze (Cushman *et al.*, 2000). As the word "delay", "disruption" is a relative term, it has no fundamental meaning except by reference to a standard of performance against which it can be measured (Pickvance, 2005). As shown by Keane and Caletka (1998), disruption and delay are two terms that are interchangeably used in the same breath. What is closely related to disruption from

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delays is the ‘delay caused by the employer’. However, still the two are not equal since disruption claim covers more aspects than a regular delay claim.

“Disruption” can be defined as a prevention or hindrance to something intended, expected or proceeding, an interruption in continuity, dislocation, discontinuity or disorder (SCL, 2002).

Keane and Caletka (1998) defines disruption in construction and engineering contracts for a given work content, as an interruption to the flow, continuity or sequence of planned work; a bringing of disorder to an activity or project.

Society of Construction Law (SCL) (2002, p.31) explains, “In the construction context, disrupted work is work that is carried out less efficiently than it would have been had it not been for the cause of the disruption.”

Delay and disruption claims often generate conflicts and contract disputes in the delivery of building and civil engineering projects. The quantification of losses resulting from disruption is possibly the most difficult area for anyone engaged in to clearly identify any additional payment that might be due (Davison and Mullen, 2008).

According to Prentice (2005), disruption compensation is only recoverable to the level that the employer caused and many standard forms of contract do not deal expressly with disruption. Disruption may be claimed however as a breach of the term generally implied into construction contracts that the employer will not prevent or obstruct the contractor in the implementation of its work. Disruption has to be established in the normal cause and effect manner. Thus, it is not just the difference between what actually happened and what the contractor planned to happen.

The major challenges, the claiming party faces in preparing a disruption claim are to identify the root causes of the loss of productivity and quantifying the associated cost in labour and equipment productivity losses. Loss of productivity can be converted to either cost or delays (Lee *et al.*, 2005). Most claims for disruption are retrospective and the claimant is strictly required to rely on contemporary records in order to establish a causal nexus (cause and effect) for identified losses, which are usually inadequate for evidencing a loss of productivity claim (Merritt, 2009).

As shown by Carnell (2005), there is very little written on disruption and disruption claims are acknowledged as very difficult to prove. Even though researchers have focused on improving and implementing disruption claim practice among contractors, still this is considered as untouched specialty in Sri Lankan construction industry. A pilot survey showed was very little instances of disruption claims in Sri Lankan construction industry. Hence the aim of the study was set to investigate “Why there is a less number of disruption claims in the Sri Lankan construction industry?”

The study primarily focused to identify the level of awareness on disruption claims including the theoretical background behind disruption claims and how to prepare and evaluate a claim for disruption, and the reasons for less practice of disruption claims. This study is important in the Sri Lankan perspective because it provides a starting point for endeavour to overcome the barriers in disruption claims; and at the same time it will lead the professionals, who involve in claims management towards a better practice.

3. METHOD OF STUDY

The research was designed as an experiment followed by an exploratory study. The experimental study was utilized to identify the level of awareness on disruption claims among contractors’ claims professionals. A single scenario that included a disruption claim event purposely developed for the study was presented to each participant. Data from experimental study was collected through structured interviews. Semi-structured interviews and a documentary survey followed it.

The experiment tested the current level of necessary knowledge required for a proper disruption claim among the participants, i.e. (a) they knew, (b) they realize with a little guidance, or (c) they could not realize. Then the interview was extended to explore the reasons for fewer instances of disruption claims through semi-structured interview. It tested the respondent’s awareness on specific claim heads under

disruption claims and collected their opinion on claiming them. The documentary survey was followed to identify the standard of record keeping practice in site level.

Interviews were conducted among key claim handling professionals from 12 number of C1 (former M1) civil contract organizations in Sri Lanka who had claim handling experience of 5 years and more. The organizations were purposively selected for their reputation for good claims management. Descriptive statistical methods were used for the analysis of data collected from semi structured interviews, which provided a general overview of the results; and data collected from exploratory nature was analysed descriptively in a narrative form.

4. ANALYSIS AND RESEARCH FINDINGS

The data collected from interviews were analysed to understand the disruption claim practice in Sri Lankan context and they are described under the headings of level of awareness of disruption claims, and factors influenced in less disruption claims. The documentary survey which was focused on the standard of documents in order to place a proper disruption claim is discussed under the heading - records availability.

4.1 LEVEL OF AWARENESS ON DISRUPTION CLAIMS

After giving the claim scenario, the interviewee was given the chance to identify the claim heads. Their response level on identification of claim heads were marked as (1) - Identified by self institution, (2) - identified after guidance, (3) - Not identified. The identification of disruption claims heads are showed below in Table 1.

Table 1: Identification of Disruption Claim Heads

Identification of heads of disruption claim	Respondent												Self intuitive (1)	After Guidance (2)	Not identified (3)	Median	First Quartile	Third Quartile
	A	B	C	D	E	F	G	H	I	J	K	L						
Loss of labour productivity	2	2	1	1	2	3	2	2	2	1	2	2	3	8	1	2	1.5	2
Additional H/O and S/O during the disrupted period	2	2	2	2	2	3	2	2	2	2	2	2	0	11	1	2	2	2
Loss of profit due to disruption	2	2	1	2	2	3	2	2	2	2	2	2	1	10	1	2	2	2
Knows the term "Disruption"	2	2	2	2	2	2	2	1	2	1	2	2	2	10	0	2	2	2

The median value expresses the response of the average respondent. Accordingly the average respondent's level of disruption claim identification is only after guidance. Further, the inter-quartile range represents the level of average 50 percent in the data set and according to that also the response level is in the level of after guidance. Therefore, it can be concluded that in general the respondents are not aware enough on the disruption claims. The average 50 percent awareness on the term "Disruption" was within the level of after guidance. This shows that "disruption" is not within the regular vocabulary. They had the sense of disruption claims because the delay and disruption are used simultaneously. But theoretically the two terms refer to separate situations. The majority of the respondents were not much aware on disruption claims. This was revealed when the response of the interviewees on the basis of identifying the heads of

disruption claims, distinguishing delay and disruption claim, the method of quantifying the disruption claim, knowledge on the sources of disruption event, were considered.

4.2 FACTORS INFLUENCED IN LESS DISRUPTION CLAIMS PRACTICE

Fifteen numbers of factors that affect the proper practice of disruption claims were explored through the field study. Awareness was tested from the method described in 4.1 and the follow up questions were posed to explore the nature of existence of other factors. Factors such as documentary evidence and availability of updated construction programme were explored through observations.

4.2.1 LEVEL OF AWARENESS ABOUT DISRUPTION SITUATIONS

The interviewees identified that the less awareness of disruption situation as a major source for less disruption practice. One respondent noted that “disruption itself is a very unclear situation and difficult to understand.” The idea of most respondents on less practice of disruption claim was owing to very less claim conscious people in site level. Further, one interviewee commented that, “the coordination between site engineers and quantity surveyor (or other person handling claims) is very less”. Therefore, there were fewer chances to take a disruptive event into a formal claim.

The semi-structured interviews revealed that even though the interviewees identified that less awareness of disruption situation as a factor, they seemed not to have proper idea on ‘what is disruption in fact’ and ‘what are the sources of disruption’; such as stop and start effect on the planned activities, the inability to gain the assumed momentum, interference in achieving learning curve productivity gains because of not being allowed to move smoothly through the site with repetitive tasks, stacking of trades and dilution of supervision. They identified the claim heads under the general view of the claiming practice but not as disruption claim.



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4.2.2 GUIDANCE FROM CONTRACTS AND CASE LAW ON DISRUPTION ANALYSIS

All respondents revealed that the less guidance from contracts and case law on disruption is a reason for not considering disruption claims. In this occasion both the experiment and opinions tally with each other. During the interviews 6 respondents directly argued that there was no clear provision for claiming disruption. Moreover, the interviewees who responded of being willing to claim for disruption situation also not aware on the method of establishing a disruption claim. One interviewee noted that “disruption claim is a vague thing, even though we are conscious on that and claim it, it is very difficult to take approval from the engineer, because it is not well dealt in the conditions of contract and most probably there will be a disagreement.”

4.2.3 LEVEL OF AWARENESS ABOUT PROVING CONTRACTUAL ENTITLEMENT FOR RECOVERY OF THE DISRUPTION EVENT

According to the perception on the interviewees it was unveiled that majority of them did not know about how to establish a proper disruption claim including proper entitlement and causal link. Therefore, less awareness about proving contractual entitlement for recovery of the disruption event was taken as a significant factor which resulted poor disruption claim practice.

4.2.4 RECORDS AVAILABILITY

Even though, the Interviewees identified lack of proper records as a factor, they were not very much mindful of the required data needed to establish a proper disruption claim. By documentary survey it revealed that keeping crew productivity reports at site level and the productivity concern on method statement was almost zero. It was further notable the unwillingness of contractors in keeping crew productivity reports and barriers in using reliable methods such as measured mile technique in analyzing disruption claim at an occurrence of a disruption situation.

4.2.5 AVAILABILITY OF THE PROPER BASELINE PROGRAMME

In a disruption claim the variable which is affected by the event is “resource led”. The proper resource loading and levelling practice helps in identifying whether the usage of resources less than the optimum usage. When defending a disruption claim, it is necessary to establish that there is no inefficiency or underutilized usage of resources due to contractor’s poor management. The study revealed that 67 % of the respondents do not do proper resources loading for the base line programme, and 75% of the respondents do not perform resource levelling in the programme.

4.2.6 CONCURRENT DISRUPTION SITUATIONS

Importantly, the answer to which project party causes lost productivity is difficult to establish. But, in the empirical survey the majority recognized the fact only after guidance. When deeply analyzing the researcher observed that due to less knowledge on proving disruption claim and less knowledge on defining the disruption claim they could not themselves identify the concurrent situation as a serious issue in establishing disruption claim.

4.2.7 NATURE OF THE DISRUPTION EVENTS

As stated by Hanna *et al.*, (2005) quantifying the impacts of changes on labour efficiency is burdensome as there are the interconnected nature of the construction work and the difficulty in isolating factors to quantify them. But the empirical finding revealed that nature of the disruption event was not identified as a factor for less disruption practice by the interviewees. This is further evident that the industry is not knowledgeable about disruption claims.

4.2.8 LEVEL OF AWARENESS OF THE DISRUPTION QUANTIFYING METHODOLOGIES

The majority stated the lack of awareness on quantification of disruption as a key reason. The exploratory study revealed that interviewees were not aware of theoretically established quantifying methods. The few who were aware practiced the “total cost method” was used but it was also not up to the mark.

4.2.9 NATURE OF THE AVAILABLE TECHNIQUES/METHODS FOR QUANTIFYING AND ANALYZING DISRUPTION CLAIMS

None of the disruption analysis method is perfect; however, some are more reliable than others under certain circumstances. Their acceptability or reliability depends on the situation of the disruption claims in hand (Aibinu, 2009). But this statement was not acknowledged by any of the respondents. The perception on the statement is obvious, since the respondents were not aware on any disruption quantifying methods.

4.2.10 ENGINEERS’ PERCEPTION ON CLAIMS

Majority of interviewees directly agreed on the statement that the engineer would have poor perception on disruption claims. One interviewee noted that “Engineer always treated the claim as an offence, and they do not fairly look at the matter”. Respondents stated that it is a common that engineers do not encourage or welcome the contractor to put a claim for their own right. While the validity of this statement is questionable, this reveals the perception of the contractors.

4.2.11 RELATIONSHIP BETWEEN PARTIES

Majority of the respondents agreed that disruption claims would not be initiated due to the necessity of maintaining good relationship with the client. The study was carried out for civil engineering contracts and it was observed that the government is the client for most of the projects. Therefore the contractors more concerned that they try to maintain good relationship with the client to get continuous projects. In their point of view it is a greater risk to go for “this kind claims” because the damage to the relationship would cause loss of future job.

4.2.12 CLAIM PREPARATION COST

Many claims take up a lot of managerial time to research and compile. The expense involved in implementing the claim procedure also can be considered as the factor affecting the decision on going for a disruption claim. However, this statement was acknowledged only by few respondents and that was also after some guidance.

4.2.13 TIME OF THE DISRUPTION OCCURRED

The instance of the disruption occurrence relative to the stage of the project affects the amount of productivity loss. Majority accepted the statement only by “after guidance” that it was difficult to handle a change which occurred at the latter part of the project. However in terms of going for a disruption claim it was not well agreed because, disruption claim was not well established and practiced among respondents.

4.2.14 THE AMOUNT IN DISRUPTION

Five interviewees by self intuition and six of them after guidance responded that the amount matters. The important aspect which the researcher noted down here was that even the interviewees who did not have proper disruption claiming practice also identified that this as a factor due to the sense and influence from current experience of other claims.

4.2.15 LACK OF SKILLED SITE STAFF AND POOR COMMUNICATION AND COORDINATION

Lack of skilled site staff and poor communication and coordination were identified by the interviewees referring them to the other factors identified, such as identification of claim situations, proper records maintaining and proper base line updating. Thus, this may not be considered as another factor that can affect.



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5. DISCUSSION AND CONCLUSION

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The findings reveal that there is a poor disruption claim practice; and even among the few disruption practices the establishment of disruption claim is not up to the mark. Further, the researchers found 14 direct factors which can influence on decision to disruption claim. For clarity they are categorized under four main headings: ability to identify, ability to prove, ability to quantify and management decision. It is represented in Figure 1 and it is assisted in drawing conclusion along with the aforesaid factors influenced resulting less disruption claims. The relationship between each activity is shown in the figure.

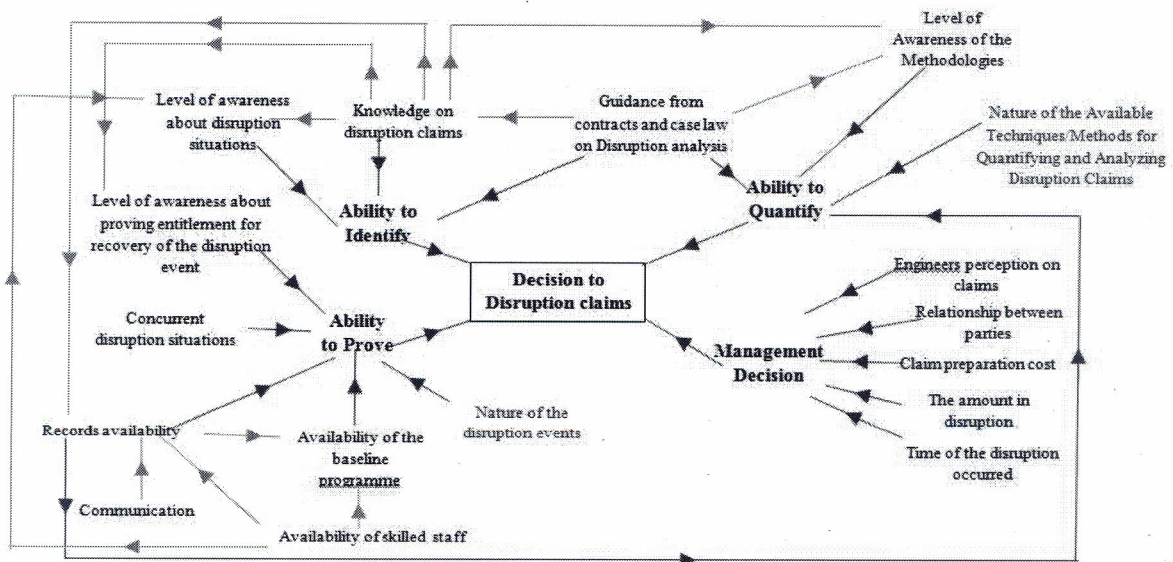


Figure 1: Factors Affecting the Decision to Disruption Claim

The majority of the claims handling persons were only able to identify the heads of the disruption claim and the term 'disruption claim' only by after guidance from the interviewer. The findings indicate that even though the industry is conscious about the losses incurred by the disruption, there was lack of motivation to claim for loss of labour productivity but more concern was there on the direct cost incurred by the disruptive event. Thus, it was evident that the dominant issue in implementing disruption claim practice is the less knowledge on the disruption claim. This was further confirmed by following situations; the interviewees has the experience in claim handling practice more than five years but the majority could only identify the disruption claim by after guidance by the interviewer; the majority could not clearly identify the sources of disruption; though the record formats are according to the normal standards the records of crew productivity exclude from the formats and resource loading and levelling aspect are not considered the in programme preparing which are in fact the crucial requirements in establishing a disruption claim.

It is now clear that fulfilling the proper knowledge on disruption claims will help to overcome the barriers of implementing disruption claims except for some culturally influenced factors which are related to management decisions such as relationship between parties and engineers perception on claims. The proper knowledge may be established by proper guidance by contracts and case laws.

Considering the findings and conclusions of the research, the following recommendations can be made for better application of the disruption claims in Sri Lankan construction industry. The recommendations may take in to practice in organization level as well as wide industry practice for better claim management practice in terms of disruption claims.

Initially to address a disruptive event in a right manner, it is recommended to use SCL protocol (available online) published in October 2002 as a guide to good practice in the analysis of delay and disruption where it can be applied in harmony with the contract provisions, but not to incorporate into a contract as it is expressly stated that it is not intended to be a contract document. Then, it is recommended to designate a discrete job cadre at site level to handle all the records. The person in the job position should responsible and accountable for whole record handling process. This should be complemented by organized record keeping procedure.

The parties to the contract should agree on a standard of a proper programme template for which the contractor shall adhere and one that includes CPM (Critical Path Method) based programme with proper resource loading and levelling aspects.

Since often the quantity surveyors deal with construction cost handling aspect and claim handling, it is strongly recommended to include construction productivity concept within the academic curricula of Quantity Surveying at Higher Education level.

As it has been identified that current record keeping system is not smart enough to tackle disruption events at site level, further research may be recommended to formulate “proper recordkeeping method to get prepared for a disruption claim at site level”. Also, in the site level the records are in various formats and it is a very tedious process to collect data when ever needed. Therefore it is recommended to develop a proper database for record day today records including a proper data sorting options. Further, it was identified that disruptive events are not identified and not clearly taken in to formal claim; hence it is recommended to carry out a research on “How to articulate a disruptive event in to a formal claim?”

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