# SUCCESS RATE AND IMPLICATIONS OF CONTRACTUAL CLAIMS DECISIONS ON CONTRACTORS IN SOUTH AFRICA

Jeffrey Khangale<sup>1\*</sup> Innocent Musonda<sup>1</sup>, and Chioma Sylvia Okoro<sup>1</sup>

<sup>1</sup>Centre for Applied Research and Innovation in the Built Environment University of Johannesburg \*Corresponding Author: jkhangale@yahoo.com

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#### **ABSTRACT**

Contractual claims are essential issues and normally disputed because they cause losses if the contractual claims fail to be honoured. The completion of projects can be best without any arising contractual claims by the contractors. However, this appears to be too ideal and almost impossible. Contractual claims have connotations of time and monies, which are to be honoured by the client to the contractor as a payment or compensation for the incurred cost. This article established the success rate or extent to which contractual claims were honoured and the implications of the client's decisions on contractual claims that were not honoured. The questionnaire was distributed to professionals involved in the administration of contractual claims in projects. Descriptive analysis was used to analyse data. Findings revealed that most contractual claims were honoured in full when they were small in numbers, and when contractual claims increase, the success rate also decreased. The findings further indicated that most projects ended in cost and time overruns due to clients' decisions on contractual claims. It is expected that the findings of this research will help construction stakeholders to avoid the main causes of contractual claims, and thus increasing the chances of contractual claims being honoured and improving the overall performance of construction projects concerning minimized delays and cost overruns.

Keywords: Contractual, Claims, Honoured, Implications, Success, Rate Decision.

## INTRODUCTION

In any economy, the construction industry is a major contributor to the gross domestic product. However, the performance of the construction is hindered by the prevalence of contractual claims made by contractors that are not honoured (Braimah, 2013). Construction projects are fraught with complexities related to standards, advanced technologies, clients' desired additions, and uncertainty in terms of time and budget constraints (Jaffar *et al.*,2011). Unfortunately, most traditional construction contracts do not incorporate or embrace these changes, leading to conflicts and contractual claims from contractors (Sakal, 2005). Given a construction contract's unique and

complex nature, contractual claims are inevitable and a common occurrence (Jaffar *et al.*, 2011; Du Preez, 2014). The successful completion of construction projects is, therefore, a paramount concern.

The first thing to remember is that contractual claims are nothing other than asserting a right, which is considered your right under the contract, to additional time or money. A contractual claim is not a dispute, nor need it be contentious. It does not mean that you are aggressive or looking for a fight. Contractual claims are very common in today's business environment; indeed, some parties are surprised if they do not receive a claim.

Disputes on projects erupt due to different perspectives on various aspects related to design and construction. Further, the incline complexity of construction processes, documents, and their conditions have contributed to higher possibilities of disputes, conflicts interpretation, and adversarial attitudes (Jaffar *et al.*, 2011). The exhausting and expensive litigation process does not make this easier as the unsettled contractual claims, that result in disputes, can take time to resolve. These have made contractual claims an inevitable burden in implementing current construction projects. Contractual claims are lifeblood issues normally disputed as they cause losses if the contractual claims is not honoured.

Researchers have conducted several studies, on claims, in the construction industry and their impacts on society. Maduranga *et al.* (2017), studied different delays which may result in contractual claims on construction projects. Most of these delays exceeded the original contract duration by over 100 per cent and resulted in additional costs of the original contract values. However, most contracts in the construction industry provide that the contractor may only recover the cost incurred if they can substantiate it with evidence. The contractor would not be entitled to additional cost for preparing any contractual claims, unless additional costs resulted from unreasonable actions or inactions with the contractual claims.

Other studies have identified causes of contractual claims related to financial, social, industrial, political, organisational behaviour, contractual, environmental, and project-related factors (Love *et al.*,2011; Fawzy *et al.*, 2013). Every construction site is different, and is never similar to the other sites. The nature of construction activities vary. Therefore, the preparation of a construction contract can be recognised as allocating risks to the parties involved in the contract, the client and the contractor. These risks include unforeseen ground conditions, site instructions, variation orders, the time of completion, the final cost, the quality of the works, client-initiated changes, errors and omissions in drawings, mistakes in specifications, inflation, inclement weather, delayed payment, changes in regulation, third party interference, professional negligence, shortage of materials, labour problem, defects in works, and poor workmanship.

Bakhery *et al.* (2014), did a study on the contractual claims problems experienced by contractors in the construction industry. He further stated that the frequency of contractual claims was unavoidable, given the form of contracts, their complexity, the number of parties involved, the risk and the pressure of time contract document, and the realisation of work. Delay and interruption of contractual claims, created contractual conflicts in the delivery of the project (Aibinu,2009). An attempt has been made to understand and evaluate the relationship between contract conditions, and different claims usually encountered in construction disputes (Moza *et al.*, (2018). Contractual claims are considered to be the most disruptive and hostile event in the project. In the construction industry today, projects are subject to more contractual claims than in any history, and the number of contractual claims within the construction industry continues to increase.

Shen et al. (2016), modelled and empirically tested the causes of contractual claims in international projects with industry surveys, structural equation modelling, and case studies from the Chinese contractors. In construction projects, conflicts are inevitable, and if not well managed can result in a dispute. Disputes are one factor that affects the successful completion of the project (Cakmak et al.,2013). Delays on construction projects are a universal phenomenon, and are always accompanied by cost and time overruns. Construction contracts have an unbearable effect on the client, contract, and consultant to a contract in terms of growth in adversorial relationships, disrupt, litigation, arbitration, cash flows problems, and a general feeling towards each other.

However, few studies have systematically addressed the success rate of honoured contractual claims, and the implications of client decisions on contractual claims. Therefore, thus article addressed a clear need to measure the success rate of contractual claims and implications that come from the decision of not honouring the contractual claim.

This article investigated the success of the nature of common contractual claims, and what drives those contractual claims that are not honoured by the client. The research further discovered whether claims were honoured in full or not and outlined the factors that influenced client decisions on claims. Finally, the research determined how the contractors are affected by the claims that are not honoured. This research is important because it will help the contractors and the client understand claims, and the type of claims they are entitled to claim accordingly. This will reduce the number of claims that are not honoured in the construction industry.

As an expendable part of the contract system, contractual claims negatively impact the projects and are inevitable in construction industry projects (El-adaway, Kandil 2009). LaBarre and El-adaway (2013) stated that allocating risks between the client and the contractor, in the construction process, involves contractual claims.

#### **LITERATURE**

#### The Success Rate or the Extent to which Contractual Claims are Honoured

Contractual claims are considered to be one of the most disruptive and unpleasant events in the project. Yusuman and Adnah (2013), further say the construction industry is complex and unique. On this basis, the success of a project involves various aspects, and the roles of various stakeholders determining the project's direction. Most construction projects experience a common delay. On-time project completion, has always been an indicator of a project's success. However, any construction project will be subject to unpredictable circumstances that may hinder the smooth passage of the construction process. Completing a construction project, on time, is the shared goal of both the owner and the contractor. If the project is delayed, each party will incur additional costs, and lose potential revenue. It is well-known that construction time performance is the basis for classifying whether a project is "successful" or not, along with the cost and quality of the project.

Tochaiwat and Chovichien (2014), conducted a survey, indicating that the contractual claims' frequency and severities have a high effect on the project. The frequency score shows that the contractual claims contributed 73 per cent or about three-fourth of the overall contractual claims in one project. This emphasises the importance of good contract preparation at the beginning of the project. A well-drafted contract can help both the employer and the contractor settle the changes that occurr before they become contractual claims or disputes, which consume more time and cost to resolve from both parties.

Abdul Aziz *et al.* (2007), say claims are indeed prevalent in the construction industry. The word 'claim' has connotations of time and monies in particular, which has to be honoured by the client to the contractor as payment or compensation for their work done. The payment is so important to meet the necessities of their living. Therefore, disputed claims should be handled and brought to their minimum to get the payoff, rather than proceed to litigation that usually consumes more time and resources. Researchers have conducted several studies on claims in the construction industry, and their impacts on society.

The study by Abdul Aziz et al. (2007), further shows that 53 per cent of the contractual claims submitted are honoured in a month after submission, and 47 per cent receive their claims within two months. Abdul Kadir et al. (2005), showed that late progress by the client to the contractor, was ranked third out of the five most frequent project delay factors, which directly affects the payment to subcontractors, suppliers, and workers.

Voyton (2004), did a study which shows that due to the increase in the demand for general contractors to compete and "win" the best job for the lowest price, dispute resolution is gaining importance in maintaining success for the general contractor by reducing the chance of contractual claims for the contractor. She further determined

whether partnering in construction projects influences the number and magnitude of contractual claims filed or paid by the contractor and the owner. Finally, this study demonstrated that the project where partnering was used, had fewer contractual claims.

Abuinu (2006), did a study which the results indicated that the contractors received an unfavourable outcome from the contract administrator's decision on their claims for the delay; the intensity of conflict was lower when there was pre-contract negotiation and pre-contract agreement, regarding the rules for quantifying and assessing the impact of anticipated delays than when there was none. It further discovered that the higher the level of pre-contract negotiation and pre-contract agreement on the rules for quantifying and assessing delays, the higher the contractors perceived the quality of the decision-making process for delay claims during the construction phase. Lastly, the higher the contractors perceived the quality of the decision-making process for delaying contractual claims, the lower was the intensity of the conflict.

A study conducted by Ujene and Udike (2016), evaluated the nature and influence of contractual claims on the performance of traditional projects. The study results indicate that extra-work, change orders and delay or extension claims are most frequent, and the average estimated claim values vary between 6.9 per cent and 30.7 per cent of the bid price. Extra work claims usually have the highest contractual claims varying up to 4.5 per cent higher than the mean estimated value of 30.7 per cent of the bid price. Delay and extension of time contractual claims ranked next, with the professionals perceiving that the value can vary up to 18.4 per cent above the estimated mean value of 23.9 per cent of the bid price. The results also show that different site condition claims and change order claims ranked third and fourth, respectively. The professionals perceived that different site condition contractual claims could vary up to 8.8 per cent above the mean value of 22.5 per cent, while the clients perceived that change order claims could vary up to 4.5 per cent above the mean value of 22.4 per cent. The results also show that tort actions, statutory, contractual claims, and quantum merit claims have the least mean values of 11.3 per cent and 6.9 per cent, respectively. The study done by El-Adawa, (2008), indicates that claims are unavoidable in today's construction industry, because they represent the administrative process required to handle the results and implications of design changes, defective specifications, quantity variations, delays, disruptions, and accelerations.

A survey conducted in Western Canada, shows that most contractual claims in construction projects involved delays, which in many cases go beyond the original contract duration by over 100 per cent. In comparison, more than half of the claims were an additional cost of at least 30 per cent of the original contract value. Other research works conducted in the United States and Thailand, also observed that the average cost growth caused by claims was about 7 per cent of the original contract value (Bakhary *et al.*,2013). Parikh and Joshi (2013), also did a study that indicated that most contracts result in problems, increasing contractual claims and disputes among

stakeholders due to various unanticipated and indefinite parameters. Aibinu, (2009) and Shrestha *et al.* (2014), said delays in contractual claims are the major sources of conflict and contract disputes in construction projects (Aibinu, 2009; Shrestha *et al.*,2014). Adindu and Ibironke (2012) and Bakhary *et al.* (2013), investigated contractual claims. Still, they have neither looked at them from a delivery method view nor their influences on project performance. Hence, this study focused on the success or extent to which contractual claims are honoured.

# Implications of Client Decisions on Contractual Claims not Honoured

The most common problems in construction projects are time and cost overruns, which have become an integral part of construction projects worldwide, followed by contractual claims. Gardezi *et al.* (2014), stipulated that delayed payments after result in disputes between the client and contractor, leading to slow down of progress, termination of contract, arbitration, litigations, claims for a time extension, and cost overrun. Andindu and Oyoh (2011), did a study that noted that contracts are often executed under various conditions involving a lot of unforeseen, unexpected, frequently undesirable, and often unpredictable factors that manifest in various ways, leading to losses and expenses.

Ojo (2014), stated that construction projects are dynamic and unique because they are contractual, complex, and lengthy subsequently making them vulnerable to risk variables, and unfavourable disputes to the project objectives. Most construction contracts, run into problems, increasing contractual claims and disputes among parties to the contract due to unanticipated and indefinite parameters. A construction project is considered successful if it is completed within time, budget and quality. Time and cost overruns, have significant implications from an economic and political point of view. In general, time and cost overruns reduce the productivity of available economic resources, edge development, and diminish the economy's effectiveness (Shanmugapriya and Subramnian, 2013).

#### (a) Cost overruns

Cost overrun is defined as the excess of actual cost over budget. Despite their negative impact on the construction project, cost overruns have become a natural part. Rosenfeld (2013), did research which examined and identified fifteen the root causes of the cost overruns, three of which are most prominent (1) Premature tender document (2) Too many changes in clients' requirements and definitions (3) Tender-winning prices are unrealistically low. These root causes were perceived as one of the greatest parts of the problem in construction projects. Long *et al.* (2008), did a study that found five significant factors causing cost overruns in construction projects: inadequate site management and supervision, lack of project management support, client's financial difficulties, contractors' financial difficulties and changes in design. Enshassi *et al.* 

(2009), did a study that identified ten major factors causing cost overruns. These factors include the increment of materials prices due to continuous border closures, delay in construction, raw materials and equipment supply by contractors, instabilities in the cost of building materials, problems of the local currency concerning dollar value, project materials control by some suppliers, constraints in resources, funds and associated auxiliaries not complete, lack of cost planning/monitoring during pre-and post-contract stages, improvements to standard drawings during constructions stages, design changes.

Olawale and Sun (2010), conducted a study that identified twenty-one major factors causing cost overruns are changed in design, risk and uncertainty associated with projects, inaccurate evaluation of projects time and cost, non-performance of subcontractors, the complexity of works, a conflict between project parties, disagreement in contract documentation, contract, and specification interpretation disagreement, inflation of prices, financing and payment, lack of proper training and experienced project manager, low skilled manpower, unpredictable weather conditions, dependency om imported materials, lack of appropriate software, unstable interest rate, fluctuation of currency or exchange rate, weal regulation, and control, project fraud and corruption and unstable government policies. The research did previously discover reasons for the difference between the tender sum and the final account. Cost overruns are also considered one of the problematic factors, which delays the project progress, since it decreases the contractor profit leading to huge losses (Enhassi, 2009).

## (b) Time overruns

Time and cost are the most important factors to be considered in every construction project. Al-Gahtani and Mohan (2007), defined time overruns as the time increased to complete the project after the planned date, caused by internal and external factors surrounding the project. Delay of project and cost overruns, is one of the most important in the construction management field.

Research done in Palestine indicated that the parties of the project (client, consultant, and contractor) do not give significance to evaluate the time and cost overruns at the end of the project. One of the most significant objectives and policies of public and private sectors dealing with the execution of the projects is to upgrade the project's performance by reducing costs, completing projects within assigned budget and time constraints, and improving quality. Projects completed within time and budget are considered the most important factors of successful projects. These help to decrease problems for all parties, and give new chances to construct other related projects. Therefore, it helps to increase the profits and development of the construction industry (Al-Najjar, 2008).

### (c) Terminations

In the year 2012, Mohammed Mahdi Hosseini indicated that unfair termination of contracts by employers, due to uncertainty in some clauses in the standard form of contracts, is the other implication of claims that are not honoured. Cost and time overruns have become an integral part of construction projects worldwide, followed by various claims. Gardezi *et al.* (2014), stipulated that delayed payments often result in disputes between the client and contractor, leading to slow down of progress, termination of contract, arbitration, litigations, claims for a time extension, and cost overrun. Andindu and Oyoh (2011), did a study that noted that contracts are often executed under various conditions involving a lot of unforeseen, unexpected, frequently undesirable, and often unpredictable factors that manifest in various ways, leading to losses and expenses.

Ojo (2014), stated that construction projects are dynamic and unique because they are conditionally contractual, complex, and lengthy. They are vulnerable to risk variables and unfavourable disputes to the project objectives. Most construction contracts run into problems, giving rise to claims and disputes among parties to the contract, due to unanticipated and indefinite parameters. A construction project is considered successful if it is completed within time, budget and quality. Time and cost overruns have significant implications from an economic and political point of view. In general, time and cost overruns reduce the productivity of available economic resources, edge development and diminish the economy's effectiveness (Shanmugapriya and Subramnian, 2013).

#### RESEARCH METHODOLOGY

## Method

This study used a quantitative technique to quantify the success rate of contractual claims that are not fully honoured, factors influencing client decisions, predominant contractual claims, drivers, and implications by generating numerical data or data that can be transformed into usable statistics. It also helps the researcher quantify the experience, opinion, view, and other defined variables. The researcher selected this method because it uses measurable data to formulate facts, and uncover patterns in research. The research process can be quantitative or qualitative; however, the quantitative method was used. Creswell (2011), agreed that basic research requires quantitative and qualitative research.

Questionnaires were distributed using email, in google form format, where respondents were required to open the link and proceed with answering. In addition, hard copies were also printed and distributed to the different respondents, and those copies were collected after the follow-ups of confirmation if they were completed. Saunders *et al.*. (2009), stated that questionnaires are usually preferred for descriptive and exploratory research.

#### **Data Collection**

In this study, primary data was collected using questionnaires to investigate the following; to what extent claims were honoured, decisions on claims, predominant claims, and implications of claims not honoured. This technique chosen for this research, was considered, the most effective way of meeting this research study objective. The research study was carried out in South Africa due to the country's large concentration of construction companies. The research was based on construction and engineering projects in the construction industry.

Questionnaires are adopted as a research technique of data collection in which personnel is asked to respond to a set of questions, in a predetermined order (Saunders *et al.*,2009). In addition Bhattacherjee (2012), defined questionnaires as a research instrument consisting of a set of questions intended to solicit a response from respondents. Questionnaires were distributed using email, in google form format, where respondents were required to open the link and proceed with answering. In addition, hard copies were also printed and distributed to the different respondents, and those copies were collected after the follow-ups of confirmation if they were completed. Saunders *et al.* (2009) stated that questionnaires are usually preferred for descriptive and exploratory research.

# **Sampling Strategy**

The study adopted a purposive sampling method, to target construction professionals more involved in administering contractual claims in the construction project. Purposive sampling is a form of non-probability sampling, in which decision is taken by the research concerning the individuals to be included in the sample, based upon a variety of criteria which may include specialist knowledge of the research objective, or capacity and willingness to participate in the research (Price, 2009). The construction professionals targeted for this research who are role players in contractual claims are project managers, contracts managers, engineers, quantity surveyors, claims managers, contract administrators, site agents, and all parties involved in contractual claims. There are two major sampling strategy groups: probability sampling (Random sampling) and non-probability sampling (purposive sampling). Teddie and Yu (2007), stated that probability sampling is generally used in quantitative research, including selecting a relatively large number of units from a population. In addition, Copper (2007), further states that probability sampling is based on random selection. Table 1 below shows the summary of participants.

# **Data Analysis**

The quantitative data collected in this study also used descriptive statistics. The research used descriptive because it describes what the data is showing and provides

the researcher with an overview of the data. In this research, descriptive statistics were presented using frequency tables, charts. In addition, it was further used whereby mean, median, and standard deviation were calculated through Statistical Package for the Social Sciences (SPSS). According to Naoum (2007), the descriptive statistics method is the simplest method of analysis that provides a general overview of the results. This method is used to present quantitative descriptions in a manageable form, and helps to simplify data sensibly.

The mean value was used to rank the frequency level of each answer in the Likert scale questions. Okoro (2015) described the mean value as the average score obtained from all the response weighted. Questions related to the last projects respondents completed were scaled from 1-5 were 1=Project 1, 2= Project 2, 3=Project 3, 4= Project 4, and 5= Project 5. The other scale was used to measure the level of agreement using 1= Never, 2= Rarely, 3 = Average, 4= Frequent, and 5= Very frequent.

**Table 1:** Summary of Participants

Participants	Participants	Frequency
Chief Adisor Contract Management	1	1%
Chief Engineer	1	1%
Claims Manager	7	6%
Contract Administrator	5	4%
Contract Manager	23	20%
Cost Engineer	2	2%
Legal Adisor	1	1%
Planner	4	4%
Project Engineer/Manager	21	18%
Quality Adisor	1	1%
Quantity Surveyor	48	42%
Site Agent	1	1%
<b>Total Respondents</b>	115	100%

#### RESULTS

## Success rate or the extent to which contractual claims honoured

Respondents were required to indicate the extent in which contractual claims were honoured in last five projects that they did. Table 2 is the summary of response which indicate that contractual claims honoured in full (100%) ranked first with the Mean (x) = 2.66 and Standard deviation (SD) = 1.654, Project 1 = 19.1 per cent, Project 2 = 7.0, Project 3 = 6.0 per cent, Project 4 = 4.3 per cent and Project 5 = 12.2 per cent. Partial

(60%) ranked second with Mean (x) =2.28 and Standard deviation (SD) =1.654, Project 1=19.1 per cent, Project 2 =7 per cent, Project 3=6.1 per cent, Project 4 =4.2 and Project 5 =12.2 per cent. Partial (40%) ranked third with the mean (x) =1.81 and Standard deviation (SD) =1.096. None (0%) ranked fourth with Mean (x) =1.67 and Standard deviation (SD) =1.065. Lastly, Partial (20%) claims honoured ranked fifth with the mean (x) =1.56 and Standard deviation (SD) =0.746.

**Table 2:** The success rate of contractual claims honoured

		Components								
	Success rate or									
Code	Extent honored	1	2	3	4	5	X	SD	Rankings	
EH1	Fu <b>l</b> (100%)	19.1	7.0	6.1	4.3	12.2	2.66	1.654	1	
EH2	Partial (60%)	26.1	9.6	15.7	3.5	7.0	2.28	1.365	2	
EH3	Partial (40%)	22.6	8.7	5.2	3.5	0.9	1.81	1.096	3	
EH4	Partial (20%)	17.4	7.8	4.3	0.0	0.0	1.56	0.746	5	
EH5	None (0%)	11.3	3.5	2.6	0.0	0.9	1.67	1.065	4	

The results indicated the success rate of contractual claims as follows. If the claims were small in numbers, they were honoured at 100 per cent. When they increased, they were honoured at 60 per cent, 40 per cent, and 20 per cent. The results further indicated that other contractual claims are honoured at 0 per cent, meaning they are not honoured at all.

# Implications of client decisions on contractual claims not honoured

Respondents were required to indicate, from the last five projects, the non-award implications that occurred in their projects. This questionnaire was designed to determine non-ward implications due to claims that were not fully honoured. Table 3 indicates that delay in time ranked first with the mean (x) = 3.13 and Standard Deviation (SD) = 1.680. Cash flow problems ranked second with the mean (x) = 2.95 and standard deviation=1.724. None of the listed implications ranked third, arbitration ranked fourth, litigation ranked fifth, and termination of the contract ranked last, with 20.9 per cent occurring in Project 1 and 0 per cent on Project 4 and 5.

**Table 3:** Non-awarding Implications

		Projects							
Code	Non-award implications	1	2	3	4	5	X	SD	Rankings
NAI1	Cash flow problems	24.3	7.8	9.6	4.3	24.3	2.95	1.724	2
NAI2	Delay in time	22.6	8.7	7.8	11.3	26.1	3.13	1.68	1
NAI3	Termination	20.9	8.7	0.9	0.0	0.0	1.34	0.539	6
NAI4	Arbitration	20.0	12.2	7.8	0.9	0.0	1.74	0.846	4
NAI5	Litigation	7.8	0.9	3.5	0.0	0.0	1.64	0.929	5
NAI6	None of the above	8.7	3.5	3.5	0.9	7.0	2.74	1.701	3

Respondents were required to indicate, from the last five projects, the extent to which they suffered the implications: the cost and time overruns in their projects. Table 4 shows that Cost overruns between 15 per cent to 20 per cent, respondents

indicated that from their last five projects, Project 1=34.8 per cent, Project 2=8.7 per cent, Project=7.8 per cent, Project 4=5.2 per cent and Project 5=12.2 per cent. Cost overruns > 20 per cent, respondents indicated the implications of cost overruns in Project 1=34.8 per cent, Project 2=17.4 per cent, Project 3=4.3 per cent, Project 4=0.9 per cent and Project 5=6.1 per cent. Cost overruns between 15 per cent to 20 per cent ranked first with the Mean (x) score of 2.29 and Standard deviation =1.570. Cost overruns > 20 per cent ranked second with the Mean (x) score of 1.84 and Standard deviation (SD) =1.236.

**Table 4:** Cost Overruns (Implication)

	Projects								
Code	Implications	1	2	3	4	5	X	SD	Rankings
IM1	Cost Overruns-15%-20%	34.8	8.7	7.8	5.2	12.2	2.29	1.570	1
IM2	Cost Overruns >20%	34.8	17.4	4.3	0.9	6.1	1.84	1.236	2

Table 5 shows time overruns and penalties from the last five completed projects. Respondents indicated that Time overruns between 15 per cent to 20 per cent on Project 1=36.5 per cent, Project 2=9.6 per cent, Project 3=7.8 per cent, Project 4=4.3 per cent and Project 5=9.8%. Respondents indicated that Time overruns>20% were 29.6 per cent from Project 1, 6.1 per cent for Project 2, 7 per cent for Project 3, 5.2 per cent for Project 4 and 7.8 per cent for Project 5. Penalties for Project 1=333.9 per cent, Project 2=11.3 per cent, Project 3=4.3 per cent, Project 4=1.7 per cent and Project 5=4.3 per cent. Apart from time and cost overruns, implications ranked first with the Mean (x) score of 2.45 and Standard deviation (SD)=1.594. Time overruns>20 per cent ranked second with a mean (x) score of 2.20 and Standard deviation (SD)=1.514. Time overruns between 15 per cent to 20 per cent ranked third with a mean (x) score of 2.13 and Standard deviation (SD) =1.480. Lastly, penalties ranked fourth with the Mean (x) score of 1.77 and Standard deviation (SD) =2.45.

Table 5: Time Overruns and Penalties

		Projects								
Code	Implications	1	2	3	4	5	X	SD	Rankings	
IM3	Time Overruns-15%-20%	36.5	9.6	7.8	4.3	9.8	2.13	1.480	3	
IM4	Time Overruns >20%	29.6	6.1	7.0	5.2	7.8	2.20	1.514	2	
IM5	Penalties	33.9	11.3	4.3	1.7	4.3	1.77	2.450	4	
IM6	None of the above	11.3	3.5	2.6	3.5	4.3	2.45	1.594	1	

Therefore, the result indicated that the non-awarding implications of contractual claims, that were not honoured resulted in delay in the completion of the project, cash flow problems, none of the implications found from literature, arbitration, litigation, and lastly, termination of the contract. The results further indicated that the cost overruns, were between 15 per cent to 20 per cent, and time overruns, were above 20 per cent, meaning projects were not completed on time.

#### **FINDINGS**

According to Abdul Aziz *et al.* (2007), and Parikh and Joshi (2013), contractors received unfavourable outcomes from the client on contractual claims in the literature review. This meant some of the contractual claims were honoured, and some were not honoured in full. According to Abuinu (2006), about 50 per cent of contractual claims that the contractors submit are honoured.

Firstly, the findings indicate that most of the contractual claims submitted to the contractor were honoured by the client in full. The second extent honoured was 60 per cent, and the third is 40 per cent. These findings indicated those contractual claims paid in full and those paid partially at 60 per cent and 40 per cent. The findings further indicated that from one to five numbers of contractual were submitted projects were honoured in full, whereas when they were more than twenty, they were honoured at 60 per cent. This meant that when contractual claims increased in number in the project, their chances of being honoured in full also reduced.

Gardezi et al. (2014), stipulated that delayed payments after result in disputes between the client and contractor, leading to slow down of progress, termination of contract, arbitration, litigations, claims for a time extension, and cost overrun. Andindu and Oyoh (2011), noted that contracts are often executed under various conditions, involving a lot of unforeseen, unexpected, frequently undesirable, and often unpredictable factors that manifest in various ways, leading to losses and expenses. Therefore, literature review indicated that cash flow problems, delay in time, termination, arbitration, litigation, penalties, time, and cost overruns are the non-awarding implications.

Secondly, the findings indicated that one of the most implications in projects is projects result in late completions due to contractual claims that were not honoured. The findings further indicated that cash flow problems of contractors to finance the project became difficult to conclude the projects. Thirdly, the non-awarding implications found from the literature indicated that none of them were non-awarding implications on the project. Lastly, the findings indicated that projects end in a dispute where arbitrations were adopted. If parties were still in disagreement, it was further referred to litigation, and the contract could be terminated.

# Contribution to Knowledge

Much research has been conducted on contractual claims in the construction industry, and their impacts on the projects. However, few studies have systematically addressed the success rate of honoured contractual claims and the implications of client decisions on contractual claims. Therefore, the study established the success rate of contractual claims. These factors influence those contractual claims decisions, when honouring contractual claims, the predominant or common contractual claims, the drivers behind contractual claims that are not honoured, and implications of client decision on contractual claims not honoured.

## CONCLUSION AND RECOMMENDATIONS

In conclusion, this study showed the highest success rate on a smaller number of contractual claims honoured by the client and the contract form, resulting in most clients submitting contractual claims. This study was able to determine the drivers and implications of non-awarding claims. From the findings of the study, the following recommendations were made: The contractors should consider the factors influencing the client decides on contractual claims. The success rate of contractual claims can be improved by considering the directives from the contract conditions. The client should consider the drivers and predominant contractual claims to reduce the project's high rate of contractual claims. Both contractors and client, should understand their obligations in the form of contracts used in the project.

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