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THE MOST IMPORTANT CONFLICT FACTORS IN CONSTRUCTION PROJECTS: LITERATURE REVIEW

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ABSTRACT
Construction projects and conflict seem to go hand in hand, with difficulties appearing in the form of rising project costs, project delays, decreased productivity, lost profits, or strained business relationships. This paper's primary objective is to provide an overview of the sources of conflict in the construction sector. The study highlighted three (3) different categories of conflict variables, including those brought on by behavioral issues, contractual issues, and technical issues. Conflict-causing behavioral variables include a reluctance to verify for constructability, a lack of clarity and completeness, and poor team communication. Conflict-causing elements related to contractual issues include delayed possession transfers, delayed client interim payments, and imprecise contract requirements. Contrarily, incompetence on the part of the contractor and delayed instructions from the architect or engineer are the conflicting variables that result from technical issues. It was believed that this report would serve as advice for Handling disputes in upcoming construction projects.
Key words: conflict, construction projects, conflict Causes

1. Introduction

The complexity of construction projects today is increasing. Construction is a process in which disagreements are essentially guaranteed McManamy et al.(1994) because to the complicated, time-consuming, and relational nature of designing and building. Conflicts among the participants are also brought on by the multidisciplinary nature of the construction process. Given the high level of uncertainty surrounding the majority of construction projects, it appears that conflict and disagreements are unavoidable in the sector Whitfield (1994)

According to a study by Kumaraswamy and Yogeswaran (1998), the most frequent causes of construction disputes are contractual issues such as variation, extension of time, payment, technical specification quality, information accessibility, administration and management, unrealistic client expectations, and determination. Conflicts can arise when there are insufficient resources, such as not enough time, money, labor, materials, and/or equipment, according to additional studies by Kathleen (2003)

Conflicts and conflicts are characterized by Smith (1992) as an industry-wide issue. Communication issues, relationship breakdowns in both the personal and professional spheres, and decreased effectiveness can all result from conflict. Conflict increases tension and keeps team members from focusing on the task at hand Wall& Callister (1995). If conflicts are not correctly handled, projects may be delayed, team morale may be low, project costs may rise, and most importantly, ongoing business relationships may be harmed, claim Cheung & Suen (2002)

Therefore, it is not surprising that the majority of construction stakeholders continue to see conflict negatively and as something that should be avoided or

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resolved as quickly as possible. Conflict, however, is a phenomenon that can have both constructive and dysfunctional impacts on people, communities, and organizations, according to numerous authors Pondy (1967).

The construction sector struggles to come up with strategies to fairly and economically handle disputes as they continue to grow in number Pulket (2005). As disagreements are frequent in construction projects and need to be resolved right away on the project site, according to Shin (2000), handling disputes should be integrated into "regular" project management during project operation.

2. Conflict Definition In The Construction Industry

According to Brown et al. (1993), among the wide spectrum of occurrences that are regarded as conflict, doubt or questioning, opposition, incompatible behavior, controversy or antagonistic interaction, and disagreements are just a few examples. A dispute can be said to occur when a claim or assertion made by one party is rejected by the other side and that rejection is not accepted, according to Kumaraswamy & Yogeswaran (1998). This demonstrates that conflicts are more likely to arise when opposing parties present evidence to support their positions.

As per Vorster (1993), "a disagreement is characterized as an argument regarding a project-related issue, typically originating from a discussion over differences in two or more parties' view of the situation." The definition of conflict given by Deutsch (1973) as "incompatible activities; conflict develops when the behavior of one person is interfering with or impeding the activity of another" lends credence to this assertion.

Perhaps there are as many definitions of conflict as there are scenarios in which it can occur. Thomas (1992) asserts that there are three common themes in the many conceptions of conflict. The first is that perception affects whether or not there is conflict. Contrarily, if the difference is genuine but not perceived, there is no conflict. The perceived difference may not exist. The interconnectedness of the parties is the second recurring topic (i.e. each has the potential to interfere with the other). Third, there are the problems of obstruction, resistance, and scarcity. Resources like cash, influence, and status are scarce. The lack of them leads to blocking behavior. Conflict arises when one party obstructs the path to another's objective or interest Robbins (1994).

These several definitions demonstrate how varied approaches are used by scholars when studying conflict, but are there differences between conflict and dispute, and if so, should we be concerned with them? As Moore (1989) does in the first paragraph of his Chapter 1, some authors fail to distinguish between the two names. The majority of earlier research on conflict and disputes, however, uses the same definition—which was chosen for this study—which typically entails disagreements over interests or viewpoints. What matters is that both phrases have "historically been considered as undesirable, something to be avoided" Cheung et al. (2006).

3. The Conflict Causes In Construction Projects

Finding the causes of issues is the first crucial step in conflict prevention Hellard (1992). Numerous studies on conflict and disputes have examined a wide range of factors related to their sources or causes in the construction industry.

According to Hohns (1979), disagreements in the construction industry in **new york city** have their own inherent nature and traits, and as a result, the origins of disputes will differ from one project to another. In his study, the occurrence of faults, defects, or omissions in the contract terms, the failure to account for the cost of an activity from the outset, altered conditions, consumer reaction, and persons involved

were listed as the five main sources of construction disputes. According to Williamson (1979), there are three main underlying causes of conflicts: behavioral issues, contractual issues, and technological issues brought on by ambiguity and inexperience.

Later, a survey by Semple et al. (1994) from through in his study in **Western Canada** revealed that scope changes, weather, and restricted site access are the most frequent reasons for claims that typically result in disputes. Multiple research, according to Pelled et al. (1999), have demonstrated that multicultural teams are more likely to lead to conflict. Later, Diekmann and Girard (1995). By study in **Glosgow city** theydiscovered the causes of contractual disagreements. They determined the impact of several project factors, such as personnel, operational procedures, and project-specific features, on the occurrence of contract conflicts. The conclusions of this study were drawn from data on the frequency and seriousness of disagreements on 88 building projects, which were subjected to logic regression analysis. According to the findings, all three concerns contributed to the likelihood of contract disputes, but the "people" issue held the key to preventing them Poon et al. (2001).

Twenty common causes of construction disputes, including speed of construction, cost and quality control, technological advancements, strict building codes, and economic difficulties, have been compiled by Kumaraswamy (1997)and will serve as the foundation for many future studies on conflict and disputes in the construction industry. Fenn et al. (1997) from their research in **united kingdom** they found Inadequate tracing mechanisms for information requests, poor management, supervision, and coordination efforts on the project's part, the lowest price mentality when hiring contractors and designers, a lack of team spirit among the participants, and a reluctance to check for constructability, clarity, and compliance are some of the identified causes of construction disputes brought on by clients. According to Kumaraswamy and Yogeswaran's (1998) researches in **china** contractual issues like variation, extension of time, payment, technical specification quality, information accessibility, administration and management, unrealistic client expectations, and determination are the main causes of construction disputes.

According to Shin et al. (2000)., disagreements can be caused by the parties involved, or by the stakeholders, such as architects, engineers, contractors, and other project-related experts. Disputes, according to Thompson et al. (2000), "arise primarily owing to lack of communication, distrust, misinterpretations of contracts, uncertainty of function and responsibilities, and a "us versus them" stance based on an imbalance in risk allocations." According to Hall (2000), consultants are also to blame for construction disputes when they fail to understand their obligations under the design team contract, overdesign projects and underestimate associated costs, deliver information slowly, take a long time to respond to information requests, fail to follow design and specification guidelines, or make mistakes due to improper coordination between civil, structural, architectural, mechanical, and electrical designs. According to a study in **Hong Kong university** by Cheung et al. (2001), the factors that lead to disputes and the characteristics of the project can be used to determine their causes. They found six common reasons for disputes, including overspending on the budget, unpaid invoices, varying rates of claim certification and submission, being behind schedule by a certain number of days, paying liquidated damages, and changing the design by a certain percentage.

Carmicheal (2002) in **University of New South Wales** identified the factors that contribute to contractor-caused construction

disputes, including poor management, supervision, and coordination of the contractor, delays or suspensions of work, failure to plan and carry out changes to the work, failure to comprehend and accurately bid or price the work, a lack of understanding and agreement in contract procurement, a reluctance to ask questions, and insufficient critical path method (CPM) scheduling and update requirements.

Project schedules created by several project players frequently indicate issues when they are combined, in **National University of Singapore**, claim Chua & Song (2003). This is because the implicit interfacial dependencies between the project activities present the biggest communication problem for the constructors. A different study by Kathleen (2003) claims that damaging conflicts arise from a lack of resources, such as time, money, labor, materials, or equipment.

Edwin & Henry (2005) identified 20 sources of disputes in **Sino-Foreign** Joint Venture construction projects, including payment, variation, extension of time, quality of work, unfamiliarity with local conditions, project scope definition, risk allocation, difference in methods, technical specification, poor communication, administration/management, unrealistic client expectations, availability of information, and adversarial approach in the present. According to a research by Cheung et al., (2006) in **Hong Kong university** the inclusion of unique conditions in contracts, changes in building plans and specifications, and the consequent contradictory and error of information in the mass of documents can all lead to construction disputes. An investigation by Cheung & Yiu (2007) into the effectiveness of mediation in settling disagreements uncovered useful variables on the causes of disputes. Construction-related issues and human behavior-related problems were segregated into two separate categories. Acceleration costs, the assessment of liquidated and ascertained damages against the main contractor, clients failing to pay for variation claims, late client possession handover, clients taking control of the site and denying access to the main contractor, mistakes significant changes in bills of quantities, argument on the prolongation costs, architect/engineer dissatisfaction with the work progress of the main contractor, argument on the me, delays in interim payments from the customer and the primary contractor's receipt of retention funds. It also covers disagreements over time extension costs claimed by the subcontractor, scope changes brought on by additional work, inadequate site and/or site investigation reports, utility services organization delays, nonpayment by the main contractor of the subcontractor, the main contractor ceasing work on the project site, disagreements over time extension costs claimed by the main contractor, the main contractor denying the subcontractor access to the project site, and subcontractor works delayed as a result of the main contractor.

Cheung & Yiu (2006) in **Univ of Hong Kong** , also identified sources of conflict relating to human behavior, such as inexperienced negotiators, too many issues brought up, both parties unprepared for negotiations, both parties wanting control over the proceedings, both parties not interested in settling, parties having unrealistic expectations, lack of leadership in the project teams, lack of trust between the parties, and a lack of confidence in the mediator.

According to Sambasivan and Soon's (2007) in **Malaysia** study there could be disagreements between the parties involved due to things like late payments for completed work, frequent owner interference, changing requirements, a lack of communication between the parties, issues with the neighbors, and unforeseen site conditions.

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The previous studies' reports on the causes of conflict describe several factors that are relevant to those investigations. Despite the fact that the majority of the study's variables are the same, the reasons nevertheless seem to be far-reaching. comprehensible or worthy of attention. This investigation will be based on the categorization or root causes discovered by Williamson (1979). The three (3) main categories of conflict reasons identified by the researchers are those resulting from behavioral, contractual, and technical issues.

4. Conflicts ,Result From Behavioral Issues

in study between **heriot watt and Manchester universty** found Among the project team's behavioral issues are interpersonal relationships, personality, cultural differences, and professional backgrounds. Other aspects of human behavior, including an individual's ambition, frustration, unhappiness, desire for advancement, communication, and amount of power, as well as fraud and faith, can also lead to disagreements Fenn & Speck, (1997). It was previously mentioned that building is an art rather than a science. The effective contract administrator, or disputant to a contract interpretation or unpleasant event on a project, is well served to know a little something about the people involved. Construction is truly people. The people in the industry have a very strong herding tendency. All people crave and desire to feel accepted or approved of. They feel a desire to imitate the leaders in their profession or the leaders in their perception of the leaders. The human aspects of gregariousness are described by words like belonging, imitation, loyalty, recognition, superiority, and prestige. Make the other person feel like he is a part of the pack by all means. Learn which group the opposite party considers to be significant. Show him how the dispute's resolution will enable him to join the group or reinforce his existing membership Robbins (1994)

through study In **Chicago University** about contract dispute, losing face costs much more than losing money. Everyone has a self-concept that they feel needs to be established Arditi& Pulket (2005). When all of the egos involved can survive, disputes can frequently be settled more quickly. People are quick to defend their self-image, but they also all wish to strengthen the position they now occupy or assert as their own. Any message that uses the terms few acquisition, promotion, saving money, or protection will therefore be heard and frequently be given action. Everyone desires freedom, a brighter future, and the possibility to improve one's self-worth Using arguments based on ambitions, achieving goals, and gaining power can help settle conflicts.

Conflicts and Disputes in the construction industry in **San Diego**, according to Camicheal Robbins (1994), occur because the parties involved have demands. The needs from the perspective of the contractor are typically financial or profit-related. The architect has the plans, the building or design, which may serve as a memorial to himself, the name, the artistic flair, the resources, the insurance premium, and similar requirements. The owners have requirements as well—they have professions in politics and business and need the space for a particular day. Goals and security are put at risk, communications become strained, and tensions always appear to be followed by demands, refusals, other more intense strains, hard, then harder postures, and financial losses when something unexpected or improperly recognized interferes with the fulfillment process. When there is a lack of teamwork and inadequate communication within the project teams, these issues develop. Construction problems are mostly caused by people, and people are also the only means of resolving them. The current societal trend toward the idea that

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everyone has rights has resulted in an excessive amount of conflict-related activity.

5. Conflicts Arising From Contractual Problems

A study in **Southern California** found A contract that outlines the trade of building supplies and services for cash governs the involvement of several parties in a project. A contract is a promise or a series of promises for which the law provides a remedy or whose fulfillment the law in some manner recognizes as a duty, according to MacNeil et al .(1974). Definition, interpretation, and clarification of the contract are all aspects of contractual conflicts. In many projects, conflicts over contractual matters account for a sizable amount McManamy et al . (1994). According to Kumaraswamy and Yogeswaran's (1998), they researched in **china** contractual issues like variation, extension of time, payment, technical specification quality, information accessibility, administration and management, unrealistic client expectations, and determination are the main causes of construction disputes.

Standard contract agreements are governed by industry organizations, norms, and laws when used in project operations. This idea of a standard contract helps operations move toward standard procedures to some extent. Because of this, standard contracts offer sufficient common ground for contractual definitions, clarifications in construction activities, and unique project requirements. Owners, contractors, designers, and everyone else involved in building are ready to acknowledge in public the obvious truth that there isn't a perfect set of contract terms. Jessup et al . (1963). All of the drawings in the contract agreements are missing a necessary dimension or feature, or they contain mechanical drafting flaws. Since designers and drafts people are only human, many have mistakes. Human faults are not the only thing that happen when designing and building a project; modifications also happen constantly. There are adjustments needed to the papers and work scopes due to unanticipated events, changes in the use of the space to satisfy updated owner needs, and other factors. A change's implications increase with project complexity. The number of addenda necessary and the likelihood of errors increase in proportion to the length of the design period. Every location a specific feature was displayed may not be known or remembered by one man. The more individuals, drawings, concepts, and ideas involved in a project, the more faults there are going to be as a result Poon& Cooper (2001). One important source of disagreements is contractual documentation. When a contractor incurs unanticipated or unbid costs as a result of document errors, the owner is held accountable.

Errors in documents become the designer's responsibility when they violate industry standards, peer judgment, and custom. When someone who has a right to rely on the professional is significantly harmed or damaged, document errors turn into liabilities. Punitive damages against a professional are starting to be taken into account as recoverable where the fact-finder determines that the professional's reluctance to accept responsibility for its actions is contrary to any acceptable norms of conduct.

Plans or drawings are another contractual issue that might lead to disputes. Plans labeled as defective are "a key source of disagreements in the design defects" [19]. Although the majority of those who work with plans have a general understanding of what this term means, there is actually no local or national standard that outlines how to evaluate plans for flaws.

No set of drawings is comprehensive or error-free, as everyone who has dealt with

plans knows. There are numerous errors, including improper scales, missing details, incorrect elevations or grades, and missing or incorrect dimensions. Not only are these mistakes frequent, but anyone who works with blueprints is aware that drawings may always be improved. Plans may always be revised and made better, but conflict will inevitably arise. Since every design has flaws to some degree, every person involved in construction employs flawed plans every day. When the plans become so flawed that their use results in excessive expenses is the key question in disputes over plan deficiencies. Plans must be made in accordance with the ordinary professional level of care, but there is no exact standard that must be followed according to the law. The subjective understanding of the plans' intent that the designer possesses is an advantage. Sometimes the customer will put pressure on you to deliver to a level that goes above and beyond what the plans' intended objectives are. In addition to this, badly drafted plans, details, notes on drawings, and requirements may all combine to the point where, in the eyes of one's peers, an acceptable performance level has not been reached. The professional's assessment of appropriateness is considerably simpler to make in the instance of omitting mistakes from a set of plans than it is in the case of errors that affect the procedures or performance standards that must be reached after completion. People that are truly willing to face these challenges every day and find solutions typically provide the solution. This appealing approach, however, is really a flimsy attempt at a solution. It does not always function, which is caused by a dearth of practice measurements. However, the culpability may be far more than the mistake or omission. Almost invariably, the ancillary expenses of a construction issue outweigh the primary expenditures. The designer must deliver a set of drawings that will enable the project to be built, as required by the owner and the contractor. According to the legislation, the owner must guarantee to the contractor that the project can be built and that, if the plans are followed, the desired outcomes will be obtained. Therefore, if the contractor's goals cannot be achieved due to the designer's error, the contractor's skill and the estimation of resultant expenses are in doubt.

6. Conflict Causes Due To Technical Problems

From one study in **Indiana in USA** The most frequent problems in project operations are thought to be technical conflicts brought on by ambiguity. Uncertainty, according to Galbraith (1973), is the discrepancy between the quantity of information needed to complete the task and the quantity of information that the organization has previously processed. The amount of data required is determined by the job complexity, or the number of various variables that must be coordinated, or by performance criteria like time or financial restrictions. The efficacy of planning, or the gathering and interpretation of information prior to the activity, is what determines how much information is processed, according to Hellard (1992) in his researsh in **Manchester united** Uncertainty can cause clients to have unreasonable expectations, which might include unrealistic contract duration, late architect or engineer instructions or information, overdesign, insufficient site or soil study report, incorrect and incomplete technical specifications, among other things.

Engineering clarification, which is a component of engineering decision-making procedures, is essentially an element of technical conflicts. For instance, a request for information (RFI) is regarded as a useful tool for resolving misunderstandings during project operations. The majority of unclear problems are explained on the spot by using

such RFI, which also addresses the issue of insufficient tracing tools for information requests. Personnel working on the project who have the necessary skills can resolve these issues. The decision-making process in engineering is reasonably simple and justifiable for each participant. Contrary to how contractual disagreements are settled during project operations, there are alternatives to settle technical issues in project management. The design flaw that triggers a significant conflict usually goes beyond an oversight. The means, techniques, environment, length, or circumstances of the building process must often be altered for a design mistake to be considered serious. This is subject to a wide range of influences. The most frequent areas for design mistakes to occur are in the foundations, the frame and enclosure construction, the use of spaces where the method and materials and the desired outcome are specified, the project duration, and in relation to related performance by others that the project in question must eventually rely on.

in study Jessup (1963) in **North Carolina** found Since the cost ought to have been specified from the outset, disputes frequently emerge because of this On projects that come in close to or below the construction budgets, few contractors file claims. When projects are completed on time or very near to it, few owners demand liquidated damages. There are very few complaints if designers are watertight and the things they specified meet the claims of the sales representative. Contrary to what most owners believe, very few contractors make false claims on purpose. The majority of supervisory project staff employed by the project's parties have little actual knowledge of disputes, what goes on in litigation, or what arbitration entails. Most people involved in getting a job done have dealt with complex issues on a daily basis through face-to-face conflict for so long that they start to think they know it all. As a result, they dislike attorneys and would rather dispute among themselves and write what they think are intelligent letters to build a record. Contractors who have profited from a task are less likely to fabricate or pursue bogus claims. Most frequently, if the task has turned out good enough to live with, a contractor who is obviously entitled to a legal contract modification via a claim will disregard the circumstance.

Contractors like to do the task quickly. They consider themselves to be builders, therefore they lose interest quickly in claims. Essex (1996) states that "Disputes develop when the task doesn't turn out properly, and too often the cause for this is the original inability to appropriately determine the cost." The contractor is not the only one that fails to initially account for the expense. Both the owner and the architect who set out to design a structure for less money than it would really cost to design or construct should be held accountable. In the construction industry, large sums of money and job scopes are estimated and committed quickly. It frequently happens for someone to forget to count something and get a price that is too low. What's worse is that most people in the sector simply lack the funds to cover their mistakes. Even the person with the greatest of intentions cannot make up for a mistake. Ironically, some onlookers could also believe that people who have the resources to make amends for their mistakes lack the level of sincerity required to fully settle the score.

The worst part is having to collect the money once all the problems with retainage, back charges, punch lists, and other issues have been handled. There is no room for the contractor to absorb cost overruns as a result of retain-age and other cash flow issues. The erection procedure that will eventually be needed is sometimes not sufficiently taken into consideration in construction costing methodologies Stipanowich (1998) in

United States. Modern designers don't want to dictate how a task should be carried out or expose any sequential limitations unrelated to strength. As a result, millions of dollars' worth of work are priced under extreme time constraints using known unit prices that have, to some extent, been validated in ongoing or recent projects and were determined based on the estimators' experience. One of the main causes of conflicts is when a contractor fails to comprehend and/or appropriately price the job in the initial quote. The constant overpowering optimism that all contractors possess—that they somehow possess charm

reluctance to examine the project's constructability, clarity, and completion. In addition, disputes can also develop from contractual issues, such as late payments from clients, tardy responses from clients, requests for extensions of time, and erroneous project timelines. Other sources of conflict that are caused by technical issues include the contractor's quality of work, price or costing errors, and late instructions from architects or engineers. In handling disputes for upcoming building projects, the project team believed that this report would be a helpful resource.

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and can get past the challenge of an obvious bid—adds to the problem

7. Conclusion

In order to provide all project teams with a clearer picture of the situation, this document provides a thorough review of the sources of conflict in the construction sector. This research primarily divided the conflict reasons into three categories: those resulting from behavioral difficulties, contractual problems, and technological problems. Conflict will result from behavioral issues such inadequate communication within the project team, issues with multicultural teams, and a

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