

Relationship between Head Contractors and Subcontractors in the Construction Industry: A Critical Review

Xiao-Hua Jin

*Program of Construction Management, School of Computing, Engineering and Mathematics, The
University of Western Sydney, Kingswood, New South Wales, Australia
xiaohua.jin@uws.edu.au*

Guomin Zhang

*School of Civil, Environmental and Chemical Engineering, RMIT University, Melbourne, Victoria,
Australia
kevin.zhang@rmit.edu.au*

Bo Xia

*School of Civil Engineering and Built Environment, Faculty of Science and Engineering, Queensland
University of Technology, Brisbane, Queensland, Australia
paul.xia@qut.edu.au*

Yingbin Feng

*Program of Construction Management, School of Computing, Engineering and Mathematics, The
University of Western Sydney, Kingswood, New South Wales, Australia
y.feng@uws.edu.au*

Abstract

The interaction between head contractor and subcontractor in modern construction often contributes to the degree of success or failure of any large-scale construction project. In this paper, previous research on the relationship and interaction between head contractor and subcontractor is examined in order to establish how these relationships will affect the overall performance of a project. Based on the review, research questions on how to best manage the interaction and relationship between these two vital project participants are proposed and future research direction discussed.

Keywords

Subcontracting, Head contractor, Relationship, Dispute, Review

1. Introduction

Engaging subcontractors to deliver a project is common practice in today's dynamic and ever-growing construction industry. The process of subcontracting work packages allows the head contractor to decentralize and minimize risk throughout the project whilst also tapping into the knowledge expertise of professional subcontracting organizations. This basic principle provides for the development of many direct relationships between the head contractor and, depending on the size of a given project, possibly up to 100 subcontractors or subcontracting organizations. Due to the fact that, during the course of a large-

scale commercial construction project, such a large number of contractual arrangements or relationships are entered into, effective management of these relationships is required.

If the head contracting organization does not effectively manage both the contractual and personal elements of the relationship between themselves and their subcontractors, the likelihood of disputes arising is significantly increased. Disputes during the course of a large-scale commercial project are to a certain extent unavoidable, this is due to the fact that the interaction during a construction project between the head contractor and the subcontractors is mainly based around: (1) Subcontract agreements and conditions of contracts; (2) Exposure to high levels of financial risk (from the viewpoint of both parties); (3) The protection of a party's own interests or motivations; and (4) Constraints based around time, money and resources. If head contractors are able to have in place, the processes (based around the above points) that provide for harmonious interactions between themselves and their subcontractors, the likelihood of project success is significantly increased.

Commercial construction is an intriguing sector in the construction industry that provides a high-stake environment for its participants with the opportunity for great satisfaction and reward for both head contractors and subcontractors. If the process of construction can be effectively managed by head contractors to allow for reward and financial gain for both themselves and their subcontractors, the likelihood of disputes occurring can be minimized. Therefore, a research project has been proposed with the objectives of (1) ascertaining the reasons for disputes between head contractors and subcontractors, and (2) identifying effective strategies for managing subcontractors in order to decrease the possibility of conflict and disputes arising. In this paper, the work of critical literature review is reported on previous research on relationship, dispute, and contract.

2. Relationship between Head Contractor and Subcontractor

Initial research conducted into the ways in which subcontractor relations are managed by head contracting organizations found consistency in the notion that head contractors and subcontractors will more often than not choose to enter into transactions with organizations whom they have previously been involved with. Head contractor-subcontractor transactions involve a significant amount of uncertainty. Some of these uncertainties stem from the nature of the construction process and others from the uncertainty of a potential partner's performance during the construction process (Kale and Arditi, 2001). The presence of uncertainty during the construction process increases the risks associated with a specific project from the position of both parties to a transaction. Due to the general opinion that, when undertaking construction work, contractors enter into a dangerous game of shifting liability, the relationship between head contractor and subcontractor can often be unnecessarily viewed adversarial. The typical contractor-subcontractor relationship is still traditional, cost-driven and potentially adversarial (Greenwood, 2001). However it is the effective management of this relationship that can significantly increase the chances of project success. Effective management of head contractor - subcontractor transactions or relationships is ultimately controlled by the human interaction that takes place during the construction management process.

The level of interaction between the representatives of the head contractor and subcontractor will in most cases be determined by the nature and scale of the construction project. If a project is complex in nature and requires extensive coordination and consultation between construction management and subcontractor management, the relationship between the two parties is formed out of necessity. This is required as general contractors and subcontractors face difficulties in assessing each other's performance in advance. Poor performance of either party can have profound effects on the other (Kale and Arditi, 2001). Not only is head contractor and subcontractor's performance delivered on an organizational level, it is also carried out through the attitudes and performance of those responsible for coordinating and managing the project works. Lau and Rowlinson (2009) have identified that working relationships are

important in effecting project performance and cooperation is believed to be a behavioral consequence of trust. Trust is held in the subcontractors upon the engagement of their firm to carry out an agreed work package. The head contractor places great trust in the subcontractors and their ability to perform the works to an agreed level of quality within a certain, usually aggressive timeframe.

Upon engagement of a subcontractor, however, the head contractor is ultimately aiming to decentralize liability from its own organization whilst continuing to meet and deliver on its own contractual obligations. The way in which this process is carried out is through the use of contracts in engaging external organizations to carry out work packages. With this process in mind, subcontractors perceive contracts and procurement to be the basis of their most critical risks (Greenwood, 2001). This opinion adds to the notion that the relationship between head contractors and subcontractors remains adversarial in nature. Greenwood (2001) has also stated that the nature of contractual interaction during the engagement of subcontractors see relationships as remaining traditional, arms-length and cost-driven from the outset of the process. This notion is an attitude that has been built upon common practice and organizational behavior throughout construction and other industries. The head contractor bares the greatest exposure to risks and, as a result, must ensure that its chosen subcontractors contribute to decreasing or controlling the risks. In addition to the claim that the attitude of the head contractor remains 'cost driven', the contracting system itself is a recipe for uncertainty as cost estimation is not an exact science (Kale and Arditi, 2001).

The nature of subcontracting in the construction industry provides an opportunity for both head contractors and subcontractors to gain from the commercial nature of the transaction. The gain is based around the often financially rewarding nature of the construction industry. However, subcontract arrangements (often fixed and firm lump sum agreements) will possibly provide for misinterpretation or other discrepancies resulting in a disagreement or breakdown in the relationship between head contractor and subcontractors. This is why the transaction between the two parties must be carefully managed throughout the entire duration of the subcontract to avoid any breakdown in what should remain as an economically beneficial venture for all parties to the transaction. It is however common to see relations between head contractor and subcontractor tested. This is due to the fact that the construction process involves uncertainties that stem from a number of sources: (1) construction operations are carried out on sites which present uncertainties regarding weather and soil conditions; (2) each project requires a new design and generates new production problems regarding the coordination and integration of the outputs of specialized task groups that carry out independent tasks (Kale and Arditi, 2001). Consequently, it is often difficult for subcontractors to predict the scale of these uncertainties and subsequently they may be underprepared or under-resourced in the event of such uncertainties materializing.

It is thus necessary to ensure that subcontractors entrusted to complete the construction tasks are likely to perform satisfactorily rather than merely focusing on cost alone (Ng and Tang, 2008). The head contractor should, from the beginning of the process, aim to fairly engage subcontractors based on the fact that they are best suited to carrying out the work packages rather than selecting a successful tender based on a low cost submission. If a subcontractor is selected based on a low tender the likelihood of subcontractor non-conformance when faced with uncertainties is significantly increased, which has the potential to greatly affect the performance of the project overall.

3. Subcontract Agreements and Conditions of Contract

The arrangement that exists between head contractor and subcontractors is based around a subcontract that is administered by the head contractor in accordance with the head contract. This arrangement allows the head contractor to govern the performance of the subcontractor to a certain extent, in order to minimize the risk and uncertainty associated with subcontractor performance. Uher (1991) claims that head contractors are able to control their subcontractors by allocating specific risks to subcontractor and

activating certain subcontract clauses to compel them to perform. This is the way in which the construction industry has been shaped, placing the head contractor in their traditional position of power. The power in this situation is administered via the use of non-standard, contractor prepared subcontract conditions, allowing the head contractor to dictate the way in which the subcontractors will carry out the works for their agreed payment sum (Uher, 1991).

When using non-standard subcontract conditions, head contractors assign obligations and rights under the contract for building to others who are not parties to the contract, but at the same time retain the overall contractual responsibility as far as the head contract is concerned (Uher, 1991). This implicitly provides the reasoning as to why such conditions are used as part of forming a subcontract agreement. The head contractor must ensure that it meets the obligations of the head contract by ensuring subcontract agreements are thorough and precise in order to cover these obligations set out in the head contract. The notion that non-standard subcontract conditions are common practice in the industry highlights the difficulty that subcontractors may face in an attempt to receive fair and reasonable conditions of contract to work under. Subcontractors have an arduous task in negotiating fair conditions, and an even harder task in getting them applied. However, this situation that has been developed over a number of years has changed over time as head contracting organizations have recognized the need for, and value of fair and reasonable subcontract conditions.

Xiao and Proverbs (2003) has identified the need for head contractors to establish partnerships with their subcontractors as this has a direct and positive link to overall contractor performance. Developing partnerships allows for an organization to predict, or become familiar with, the likely performance of a partner or party to a contract. Partnerships also provide for familiarity of standard agreements and the ways in which an organization will perform in administering an agreement or contract. In a commercial construction application, due to the competitive nature of the tender process from the standpoint of both head contractors and subcontractors, partnerships may often be unsuitable due to the ever-changing conditions of the construction market. However, forming partnerships may reduce the likelihood of conflict or disputes due to an imbalance of power between head contractors and subcontractors carried out via the use of weighted contracts.

Conditions and stipulations of performance are existent in the commercial construction industry from the initial stages of the construction conception and planning process. Upon engaging subcontractors, a head contractor will from the beginning of the process set out the rules of forming a commercial relationship with their organization. The conflict that exists in this situation is the tradeoff between compliance of contract or tender conditions versus the element of cost or more specifically cost minimization. This is where accuracy and professionalism of the head contractor can greatly assist in the ideal and effective development of a relationship between itself and a potential subcontractor. Once the relationship between the two parties is officially formed under an agreement of contract, the ability of head contractors and subcontractors to make a profit is very much related to the success or failure of forming fair and equitable contracts and executing them in the most effective and productive manner (Uher, 1991). However, the approach taken by many head contracting organizations is too focused on the protection of their own financial situation and interests. As most construction activities are performed by subcontractors, it is clear that the smooth execution of subcontracts is the key to the successful production process (Uher, 1991). More investment by head contractors should therefore be made into management systems that aim to protect the interest of the subcontractors which, in turn, provides positive outputs for their own operations and project performance.

Investment into the management of subcontractors can be made in various ways, one of the most significant being the investment of human resources. This need is indirectly identified by Ng and Tang (2008) who claim that the widespread usage of subcontracting has resulted in a shift of the main contractor's role towards managerial, supervision, financial and documentation functions. Specifically, the documentation functions are presence of legal consultants and allow head contractors to control

performance via the use of contracts. Shifting away from the presence of contractual agreements it must be recognized that subcontractors and their representatives respond to contractual and other pressures from the head contractor in a range of ways, due to the widely noted opinion that the relationship between the two parties is adversarial. The response can often be negative or defensive. This is where the investment in effective communicators and managers by the head contractor will greatly assist in controlling and limiting confrontation that may arise between themselves and their subcontractors.

Previous research has outlined that subcontractors do make an effort to know subcontract conditions (Uher, 1991). But onsite coordination between subcontractor administration and their onsite representatives must be significantly prevalent to ensure performance is within the standards set out in the subcontract conditions. Head contractors must identify the ways in which they inform their subcontractors and how it affects their performance and the project overall. Part of the management of the subcontractors to a project is ensuring that the subcontractors are adequately informed to allow them to work towards full conformance of their contract. It is widely accepted that standard head contracts are almost universally used, however the same cannot be said about subcontract documents (Uher, 1991). Head contractors implement these non-standard contracts to protect the interests of their own organizations and its performance throughout a given project. Most in-house subcontract documents often contain terms and conditions unfavorable to subcontractors (Peacocke, 1978), as this is common practice throughout the industry subcontractors must ensure that they protect themselves and their operations by inspecting and reviewing all contracts and agreements entered into. By maintaining an informed position at all times during a project a subcontractor is able to guarantee and maintain their performance based on what may be a challenging subcontract agreement.

The notion of inequality between parties is generally where problems and conflicts are born during the process of subcontracting and the agreements associated. Head contractors are faced with risk on a huge scale and must attempt to legally mitigate this risk via any means possible; subcontract conditions are the main way in which this is process carried out. The economic conditions and the need for constant productivity for subcontracting organizations provides reason as to why subcontractors will enter into an agreement that can be so heavily weighted against them. The commercial construction environment, as described, requires a need for coordination and cooperation between head contractors and subcontractors providing conditions are fair, equal and legally protected for both parties. In order to conceive a work environment that will be fair, equitable and smooth running, subcontractors should aim to fully and coherently understand the conditions to which they will be working under. Dulaimi and Hong (2002) have identified that main contractors will be more willing to select subcontractors that show a positive attitude, commitment and quick response to their needs, all of which can be more easily achieved if subcontractors are fully aware and to a certain extent in partial control of their rights and responsibilities governed under the subcontract agreement put in place by the head contractor.

4. Disputes: Breakdown in the Relationship

Due to the presence of non-standard subcontract conditions and a vast array of other contributors, often at various stages throughout the construction process, the relationship between head contractors and subcontractors will breakdown. The result of the breakdown is the occurrence of disputes. In any industry, where large sums of money are involved, disputes are practically unavoidable. While a considerable amount of knowledge has been accumulated about dispute causation, disputes continue to prevail and disharmonize the process of construction with considerable cost (Love *et al.*, 2010). In construction, disputes are typically damaging with great regards to cost and time, two of the most recognised performance parameters governing both head contractors and subcontractors. Therefore, it is imperative that considerable effort is made by the head contractor to identify and limit the cause and frequency of disputes throughout the construction process. The process of subcontracting is built upon the human interaction that takes place between the representatives of both the head contracting and subcontracting

organizations. The representatives involved in the process determine the nature of the dealings dependent mostly on the ways those individuals chose to conduct their business. However when these dealings apply pressure on the individuals at the front of the operations it is construction specific production factors such as scope changes, erroneous documentation and ambiguous contract conditions that significantly increase the likelihood of relationship failure during the construction process (Love *et al.*, 2010).

Kumaraswamy (1997) has identified root causes in which contribute to the occurrence of disputes the industry, these include: unfair risk allocation; unrealistic time/cost/quality targets by the client (in this application passed onto the subcontractors); adversarial industry culture; and unrealistic information expectations. These root causes provide an underlying reason for disputes arising, and if eliminated, would prevent recurrence. The causes mentioned above provide a starting point for a range of endless disputes that may arise during construction however, it is the mindset and personalities of the individuals involved in the disputes that will go on to diffuse the conflict or carry it forward with a potential for significant cost and difficulty. In addition to the mindset and individual personalities of the parties to a dispute, previous experience and dealings with a specific party may also determine the scale and nature of a dispute as this may impair judgment adding to increased conflict and relationship pressures.

The relationship between head contractors and subcontractors, as discussed, is based around contractual agreements and often, previous experience with the opposing organization or individuals. This is where the division of the working relationship between the two parties exists, the balance between human behavior and construction-influenced factors. Yiu and Cheung (2006) identified two similar categories as the main factors contributing to the occurrence of disputes in the construction industry: (1) Construction related, variation and delay in work progress and, (2) Human behavior parties, expectations and inter-party problems. It is clear, however, that these two factors provide a dependent and independent variable that exists in almost all construction projects and applications. The construction related variation and delay in work will significantly impair the human behavior of the negative beneficiary in an instance of construction related difficulty or non-conformance. Therefore, it is necessary for head contractors and their representatives to ensure that their actions are not solely guided by the productivity of performance of subcontractors.

It is clear that a high number of claims are made based on scope changes leading to variations. This is a problematic area throughout the industry due to the fact that entitlement to payment is often varied in the eyes of subcontractors, head contractors and superintendents. The relationship between head contractor and subcontractor will often be tested during the process of valuing variation and claims for works outside of the subcontracted scope of works originally agreed upon. The conflict lies in the sense that the head contractor must obtain certification of claims for variations from the superintendent, who in many cases is hesitant to pay excessive amounts outside of original tendered budgets. This is how both head contractors and subcontractors often feel the financial implications of disputes well before litigation or official disputes commence. Skilled subcontracting organization will often also attempt to expose the vulnerability of the head contractor when significant claims for variations can be made that may have an overlying affect on the construction program or items on the critical path of a project. Bussy and Hughes (2004) identify that in recent times, a prevailing skills shortage has contributed to head contractors failing to deliver services within specified time frames. Skilled subcontractors are vital in the deliverance of any project and, if managed appropriately, will often provide the head contractor with opportunities to enhance the performance and outcome of the project overall. There are however, times where subcontractors will be cunning in their attempts to gather additional margin on a subcontract through variations and extras as instructed by the head contractor. This process also identifies how personal interaction, mentioned previously, between head contractors and subcontractors can contribute to the efficiency of many processes carried out during the execution of a large-scale construction project.

The ways in which disputes between head contractors and subcontractors are settled must also be examined in order to determine the affect a significant dispute during the construction process will have

on the overall outcome of a commercial construction project. Groton and Lawrence (2010) have identified that the construction industry has long recognized the need for a speedy and expert way of addressing problems on construction project. And subsequently, if left unresolved, problems are likely to disrupt and delay completion of projects and possibly interfere with their success. Head contracting organization and their representatives should always aim to act instantly in an attempt to resolve disputes on site minimizing the time in which is lost or the negative influence a dispute may have on the project. However, it is often the case that larger more complex disputes cannot be resolved at on site level and therefore a more official method of dispute resolution may be necessary. The occurrence of extended disputes or the need for external dispute resolution has the potential to significantly damage the relationship between head contractor and subcontractor, usually due to the presence of the significant time and cost investment that will be made upon entering a course of official dispute resolution.

Litigation or off-site external dispute resolution will greatly affect the relationship between head contractor and subcontractor. The parties' business relationship often suffers and is a regrettable casualty if the relationship has been a long and productive one (Groton and Lawrence, 2010). This, not only affects the current project of which the dispute arose from, but a situation that results in the ending of business relations between a head contractor and subcontractor has the potential to affect an organizations future performance and reputation. Problems that occur between head contractors and subcontractors need to be dealt with at the earliest possible stage during the life of a dispute. Delayed resolution can cause parties to become entrenched in their positions, making it more difficult to achieve the 'best net result' for them. In addition, emotional barriers may make it hard to let go of the dispute (Groton and Lawrence, 2010). Subcontractors in many situations are forced to maintain a strong stance on their positions during a dispute, due to the nature of the competitive tender applications attached to the commercial construction industry. A dispute, for a subcontractor, may be the difference between a profit or a loss for a given set of subcontract works as in many commercial construction situations subcontractors are forced to lower their price substantially to win the right to perform the subcontract works.

5. Research Questions

Based on the literature review, the following research questions are proposed, the investigation of and answer to which are expected to provide insight into how project performance is closely linked to the management of head contractor-subcontractor relationship.

- What are the main sources of problems in the head contractor-subcontractor relationship, which are likely to result in disagreements or disputes between the two parties?
- What strategies and practical methods of subcontractor management can be adopted by head contractors to effectively enhance the head contractor-subcontractor relationship, the subcontractors' performance, and in turn, the project's performance?

These research questions provide the foundations for an in-depth empirical investigation into the nature of current relations between head contractors and subcontractors in the commercial sector of the construction industry. The collection and analysis of data from the perspective of a range of head contractors are expected to generate informative and interesting research findings indicating how the overall success of a project is linked to the relationship between head contractors and subcontractors.

4. Conclusion

The review of previous literature has identified the need for effective management of all subcontractors by head contractors. Not specific to the construction industry, any commercially based interactions or transactions provide an arena for difference of opinion due to a number of contributing factors. In the ideal scenario the head contractor will identify that harmonious relations between themselves and their

subcontractors lead to increased project performance overall. This recognition should be evident in the way in which they operate and by the individuals at the coalface of the construction project. Most importantly subcontractors cannot be taken for granted by the head contractor. Subcontractors have, over time, become arguably the most important resource available to head contractors and their highly profitable operations. Much research has identified that interactions between head contractors and subcontractors are adversarial due to the imbalance of power existent in the relationship. In the interest of the head contractor, it needs to be consistently recognized that subcontractors are often their most vital tools in the successful delivery of a project. The quality of a firm's relationship with other firms is a strategic asset that can have important implications on its operations and activities, and in turn, its economic performance. Two fundamental elements were identified: (1) relations between the two groups are increasingly controlled by head contractors; and (2) however, maintaining high quality relations is beneficial to both head contractors and subcontractors. Therefore, research questions are raised to examine the nature of the relationship that exists between head contractors and subcontractors in future research.

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