

The Contractor-Subcontractor Relationship Types in the Construction Industry in Saudi Arabia

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Abstract

Purpose: The purpose of this study is to examine the dyadic relationship between contractors and subcontractors in the Saudi construction industry. The perceptual differences in buyer-supplier relationships from the relational perspective are studied in order to identify the most common types of the contractor-subcontractor relationship in the Saudi construction industry by assessing five dimensions-trust, commitment, decision making, information sharing, and goal congruence. Methodology: To gain insight into and a deeper understanding of the topic, this research adopts a qualitative method using four case studies from the industry: one buyer firm and three suppliers. Twelve interviews were conducted in total, three with the buying firm and three with each subcontractor. Findings/Results: Regarding the research question, the type of relationship between the main contractor and its subcontractors seems to sit between the "repeated transaction" and the "coordinated" type of relationship. However, both types are considered to be adversarial types of relationship, involving characteristics such as lack of trust and low levels of information sharing. Originality/value: Theoretical contribution: the research contributes to the buyer-supplier literature by providing a dyadic study and showing how the buyer and supplier have different views about their relationship. Methodological contribution: a case study approach was used that led to an examination of issues that were not explained by previous studies. Practical contribution: useful information was provided for both contractors and subcontractors, such as the factors that affect their relationship. Identifying these factors and their impact on their relationship will enable both parties to act to remove these barriers and obstacles that prevent them from developing deeper and clearer relationships with their partners.

Keywords

Contractor-Subcontractor Relationship, Dyadic Relationship Types, Collaboration, Adversarial, Construction, Saudi Arabia

1. Introduction

The management of the buyer-supplier relationship (BSR) is one of the most essential aspects of supply-chain management. Indeed, effective supplier-relationship management can improve a company's competitive advantage (Morgan & Hunt, 1994). Moreover, a sound contractor-subcontractor relationship could be the solution to most project problems, such as cost overruns and delays. The relational theory proposes that some resources or capabilities are not available internally to the firm; therefore, the firm looks for an external provider that has the knowledge and capability to perform a specific task (Morgan & Hunt, 1994). A supplier can be a source of competitive advantage for the buying firm—for example, if it has specific assets that are not available to competitors, advanced know-how/technology, complementary resources and capabilities, or effective governance (Dyer & Singh, 1998).

Traditionally, general contractors would perform whole projects using their own capabilities. Now, however, the role of the general contractor has changed and it is mainly concerned with activities such as surveying, contract management, estimating budgets, and planning, directing and controlling projects. About 70% of project work is executed by subcontractors; this increased reliance on subcontractors in the construction industry could be due to the fact that contractors take advantage of subcontractors' specialisations to enhance its overall capability, as well as to free up its resources (Okunlola, 2015). Moreover, outsourcing allows firms to free up its capacity and to focus more on its core competencies, which improves their operational efficiencies at the same time as improving their flexibility (Conner & Prahalad, 1996). Nevertheless, outsourcing has increased the importance of the effective management of contractor-subcontractor relationships, as many of the organisation's critical activities are performed by external parties (Saeed et al., 2005). Therefore, this puts pressure on main contractors to manage their subcontractors efficaciously, as they are effectively part of their supply chain. In Saudi Arabia, like other countries, general contractors assign a large percentage of construction works to subcontractors. Therefore, it is essential to study the relationship type between contractors and subcontractors within the Saudi construction industry. It is evident that a dependence on subcontractors will increase the possibility of problems occurring between the main contractors and subcontractors, such as payment delays from the contractor or work delays by the subcontractors. Thus, it is also important to study the factors that cause interface problems between contractors and their subcontractors within the Saudi construction industry.

1.1. Background

Throughout the past several years, the Saudi construction sector has gone through many development phases due to the fact that the Saudi government started to focus more on internal developments, resulting in many projects initiated by the government in the major cities of Riyadh, Jeddah and Ash-Sharqiyah. The Saudi government started by restricting the foreign companies by introducing the government tenders and procurement law that focus on giving more opportunities to local companies. However, local companies were required to imply the new legislation in term of labour rights, building codes, trucks registration etc which limited their abilities. These projects could not be constructed by the existing companies and that attributed to the lack of specialties and the cost of implementing the new legislations. Thus, many business owners employed subcontractor companies to exploit these opportunities and meet government and market demand.

The Saudi construction market is the largest in the Middle East and is ranked second in the Saudi economy, contributing about 8% of total GDP. This is partly due to the fast-growing population, which is putting pressure on current infrastructure. Consequently, a number of government projects have been initiated to develop the country's infrastructure (Canadian Trade Commissioner Service, 2014). The government gives priority to essential projects such as roads, airports, metros and railways. However, this year the construction sector has been hit by the drop in oil prices, which has caused payment delays and increased the level of uncertainty in the industry (Bangera, 2016).

1.2. Research Gap

There is an increased reliance on subcontractors within the construction industry globally and within the Saudi industry in particular. According to Okunlola (2015), contractor and subcontractor relationship types have a significant effect on project success. However, the topic of subcontractor management has been ignored in the literature (Moody et al., 2008), as well as the interface problems between contractors and subcontractors (Humphrey et al., 2003). Moreover, according to Frödell (2011), most of the research on the buyer-supplier relationship is centred on the manufacturing industry. There are few studies conducted on the context of the construction industry. Moreover, the studies in the construction industry have mainly focused on the client-contractor relationship and ignored the relationships between contractors and subcontractors (Saad, Jones, & James, 2002). This could be because the industry is mainly driven by clients' needs (Akintoye & Main, 2007). Furthermore, the construction industry has different characteristics from the manufacturing industry; for example, it is a project-based industry that operates on tight turnaround times. For this reason, findings from the manufacturing industry may not be applicable to the construction industry (Errasti et al., 2007).

1.3. Purpose of the Study

The construction industry in general has been associated with a wide range of problems, such as cost overrun and project delays, which have been attributed to a lack of effective collaboration due to the traditional procurements approach applied worldwide. The Saudi construction industry in particular is criticised for underperforming, lacking collaboration, and showing slow progress because of its large number of delayed projects. Therefore, the purpose of this study is to examine the dyadic relationship between contractors and subcontractors in the Saudi construction industry by studying the perceptual differences in the buy-er-supplier relationship from a relational perspective using five dimensions—trust, commitment, decision making, information sharing, and goal congruence in order to identify the type of the contractor-subcontractor relationship in the Saudi construction industry, and discover how the relationship type impact project completion (see Figure 1).

1.4. Research Objective

To identify which type of relationship is most common between contractors and subcontractors in the Saudi construction industry.

1.5. Research Question

What are the most common relationship types between contractors and subcontractors in the Saudi construction industry?

2. Literature Review

2.1. Contractor-Subcontractor Typology

Buyer supplier relationship typology studies seem to evolve around two perspectives that act as a governance mechanism for the exchange relationships. The first is the relational content relationship approach, based on relational attributes such as trust, commitment, and cooperative efforts (Tangpong et al., 2015). The second perspective is the power-dependence approach, which includes attributes such as dependence, power, and transaction-specific investments (Tangpong et al., 2015).



Figure 1. Structure framework diagram.

The relational approach reduces opportunistic behaviour through the partners' expectation of relationship continuity and mutuality (Josi & Campbell, 2003). This is primarily by using relationship norms mechanisms, such as trust and commitment, to maintain their relationship and achieve common goals (Wang & Wei, 2007). Trust is defined as "an implicit or explicit pledge of relational continuity between exchange partners" (Dwyer, Schur, & Oh, 1987: p. 19). Trust requires both parties to refrain from exploiting each other, and to have trust in their partner (Wang & Wei, 2007). Whereas commitment is the long-term desire to sustain valuable relationships (Wang & Wei, 2007). This long-term desire promotes learning, collaboration, and flexibility, as well as reducing uncertainty (Josi & Campbell, 2003). Thus, commitment safeguards both parties from opportunistic behaviour and enhances the relationship exchange. On the other hand, the power and dependence approach states that the relationship specific investment and a reduction in uncertainty are the key factors to reduce opportunism (Williamson, 1985) and that this can be achieved through formal commitments and contractual guarantees. Relationship specific investment depends largely on the level of power and dependence between the parties involved in the relationship. Dependence is defined as "the degree to which an exchange party needs to maintain the relationship with the other party to obtain necessary resources and to attain its desired goals" (Tangpong et al., 2008). The level of power is determined by the degree of dependence, where the less dependent partner will enjoy a high level of power over other party which is more dependent (Tangpong et al., 2008).

Relational content and power-dependence attributes are important to the buyer-supplier relationship, as these attributes can influence the performance of both buyer and supplier on issues such as control, opportunism, prevention, co-operation, and power exploitation (Tangpong et al., 2015). Therefore, it is important to view the buyer-supplier relationship from both perspectives. However, in this research, BSR typologies will be discussed from a relational perspective because it focuses on the exchange of values between actors who rationally seeks to maximise their benefit in the social system, and it also provides valuable concepts that explain complex relationships, which is helpful as most of the value creation in BSR relationships is based on non-contractual elements such as trust and commitment (Tanskanen, 2015).

2.2. Contractor-Subcontractor Relationship Typologies from a Relational Perspective

Contractor subcontractor relationship typology studies based on relational attributes include Macneil's (1980) in which he made a distinction between two types of relationships in his influential work "The New Social Contract". He proposed two types of relationships, discrete transactions and relational exchanges. In a discrete transaction, contractor and subcontractor form a relationship based on a simple transaction where firms seek to lower the amount of transactions in

their relationship to maximise their profits. On the other hand, in relational exchanges, the contractor and subcontractor establish high relational norms based on trust, long term commitment, and cooperation, and both parties seek mutual benefits.

Later research also included the two types of relationship proposed by Macneil's (1980) study, such as Helper and Sako (1995). In their study on the automobile industry they made a distinction between the two types of relationships and their impact on operational performance. They suggested terming these relationships exit relationship/adversarial and voice relationship/collaborative. A voice relationship has more frequent information sharing, higher trust, stronger implicit commitments, and joint problem solving. In terms of operational efficiency, suppliers in a voice relationship tend to perform better than others in an exit relationship, as they are more likely to embrace development programmes without extra costs (Helper & Sako, 1995). Whereas in exit relationships, the subcontractors must bid against other subcontractors, and are selected according to the lowest price. Additionally, the subcontractors will be given a short contract to enable the contractor to switch to another subcontractor in the case of quality issues or price increase. According to Helper and Sako (1995), even though their results come from the automotive industry, it is generally applicable to other industries, including service sectors.

2.3. Middle Types of BSR

Mudambi and Helper (1998) suggested a middle type of BSR between adversarial and collaborative relationships: the "close but adversarial" relationship. This type of relationship includes both formal cooperation and non-cooperative behaviour, which means that the buyer-supplier seeks to form a cooperative relationship, however, a buyer firm will exploit the supplier from time to time to gain short term benefits during their competitive weakness. As a result, suppliers feel vulnerable, which influences their relations with the buyers firms, leading the buyer firm to reduce its dependency. Moreover, the probability of the buyer firm to switch to another supplier is high, because firms follow their self-interest and will not become locked in a relationship when the market offers better options. According to Mudambi and Helper (1998) the switching decision is influenced by competitive factors represented by porter five forces and by transaction-specific investments.

Another attempt to find a common ground between arm's length relationships and strategic partnership relationships was found in Dyer et al.'s (1998) work on the automobile industry. They proposed "durable arm's length" as a type of relationship which is superior to the traditional arm's length model. Firstly, the durable arm's length model has less transaction costs, because it has fewer suppliers and offers a long term contract. Secondly, it enables the supplier to achieve economies of scale because they are guaranteed future work and have long term commitments; therefore, they are willing to invest in specific assets. Finally, it maintains healthy competition between suppliers. They have stated that using short term contracts with suppliers is no longer a cost-effective method in most industries, which is due to three main reasons. First, managing large number of suppliers is usually associated with high transaction costs, due to negotiation and order processing; for instance, GM employs more people in the procurement department than Toyota, to be able to manage its large supplier base (Dyer et al., 1998). Secondly, distributing orders amongst multiple suppliers prevents a supplier from achieving economies of scale. Moreover, bargaining power may not be achieved by having multiple sources, rather, it might be achieved by increasing purchases from a single supplier, increasing the supplier dependency and enhancing the buyer's bargaining power. Finally, buyers do not need to have a large supplier base to achieve healthy competition, as healthy completion can be achieved through two or three suppliers, as long as they have equal competencies and capabilities.

Durable arm's length is different from the arm's length approach in various aspects. First, suppliers are selected according to their capabilities and the ability to offer the lowest cost over the long term. Two or three vendors can be chosen to be long term vendors, whereas in the arm's length relationship all suppliers are allowed to bid regardless of their capabilities or the transaction costs involved in managing them. Secondly, both buyers and suppliers make some investments in coordination systems, such as order entry and logistics, to facilitate coordination. Finally, future business is guaranteed for the supplier as long as it stays competitive. However, the buyer firm needs to revisit price benchmarking frequently to maintain competition between the two or three selected suppliers. This will show the suppliers that they need to continually reduce prices. Nevertheless, assured future business and long term commitment will encourage the supplier to make certain investments in coordination mechanisms to stay competitive. Moreover, the buying firm may also need to revisit their supplier base every five years to allow other suppliers to bid, in order to encourage their existing suppliers to enhance their capabilities and ensure they still offer the lowest price.

2.4. Broader Types of BSR

Research on BSR typologies is expanded further to include a broader range of types such as discrete transactions, repeated transactions, long-term relationships, buyer-seller partnerships, joint ventures/strategic alliances, network organisations, and vertical integration (Webster, 1992). In a discrete transaction, the exchange relationship is based solely on price mechanism, where the buying firm seeks the lowest price in the market. In discrete transactions, the exchange relationship between the two actors occurs at one time with no previous experience or interaction with the other party. Moreover, there is no preference and loyalty between both parties, and no commitments beyond the written contracts. Additionally, both parties include only the necessary information to conduct the work. Moving along from discrete transaction to repeated transaction, the buying firm purchases from the same supplier several times, which could be because there is lack of suppliers (Palmer, 2007) or the supplier proved its competence and capabilities to the buyer firm. In this type of relationship, there is little loyalty and commitment, as well as low level of trust, which could be the foundation for a long relationship. Another type of relationship is a long-term relationship, where the buying firm has a list of qualified suppliers and will award the supplier a long-term contract based on the lowest price. The BSR is still an arm's length relationship because suppliers are involved in competitive bidding and the supplier with the lowest price will win the largest share of the work to maintain competition among suppliers, in a similar manner to the durable arm's length relationship (Dyer et al., 1998). However, it differs in the sense that price is not the single criteria for the supplier's selection, as it also focuses on aspects such as quality and delivery as well as technical support.

Moving from an adversarial relationship type to partnership relationship type, in a buyer-supplier partnership there is a high level of dependence on the supplier in particular activities such as JIT, where the buying firm depends heavily on its partner to deliver the right amount of materials at the right time. Moreover, both parties develop trust which reduces opportunistic behaviour and facilitates long-term relationships. In this type of relationship, price is not the primary selection factor, rather, it depends on many factors, such as supplier, operational, and innovation capabilities.

Strategic alliance is the next step after partnership, because it requires both buyer and supplier to move beyond interfirm cooperation to have an aligned strategic goal. This enables them to achieve a competitive advantage and to differentiate their output from other competitors. It could be in a different form, such as forming a new entity or a new firm. A new entity includes forming a product development team or investing in specific assets. The other form is the creation of a new firm (or a joint venture) with its own capital and shared resources. This type of relationship involves high trust levels and long-term commitment from both parties. The next step is a network relationship, where firms come together to form a network of organisations through combined divisions or subsidiaries. The basic feature of a network relationship is its flexibility, where the hub firm guides most of the activities including the development and management of all partners. The final step is integration, where the buying firm shifts from the "buyers" towards a "make" decision to secure resources and prevent opportunism. All in all, according to Webster (1992), there is clear evidence that there is a shift from traditional arm's length approaches within the buyer-supplier relationship, which could be due to the increased pressure on suppliers to reduce costs, provide better quality, and to offer innovative products or projects.

Others argue that BSR types can be categorised into a smaller number of types which are more meaningful. Lejeune and Yakova (2005) developed four BSR ty-

pologies based on the theory of relational models developed by Fiske (1990) and the construction of interdependence discussed by Sheppard and Sherman (1998) which captures communicative, coordinated, collaborative, and coopetitive relationships. They argue that organisations develop relationships that cannot be simply described by a market or hierarchy type of relationship, but that there are other types of relationships in between that have allowed for a better understanding of the relationship between buyers and sellers. Furthermore, firms can reduce costs and perform better through other types of buyer-supplier relationships, rather than pure transactions and vertical integration (Lejeune & Yakova, 2005). Lejeune and Yakova (2005) examine contractor-subcontractor relationship types through the nature and depth of interdependence, characterised by four dimensions: trust, decision making, information sharing, and goal congruence. The communicative relationship has shallow dependency, which indicates that dependence goes in only one direction and responsibility is transferred to the less independent party, making the other party more dependent (Sheppard & Sherman, 1998). This type of BSR relationship is characterised by short term relationships and market mechanisms that encourage price competition between subcontractors. Trust in a communicative relationship takes a form of reliability, which means the buying firm is confident that the supplier firm will act in accordance with its commitments. The decision-making process in this relationship is autonomous and independent, meaning each firm tries to meet its own objectives through negotiation. In terms of information sharing, it is very low and is limited to the transaction between the two entities. The information shared is limited to information such as order quantity, quotes, and exchange price. However, goal congruence is absent in the communicative relationship, which is due to the lack of information sharing and independent decision making.

The coordinated relationship is associated with deep dependence, which means that the fate of the dependent party is determined by the less dependent party; thus, it has a large probability of opportunism and abuse (Sheppard & Sherman, 1998). Moreover, this type of relationship is viewed as a hierarchy of entities in which one party acts as a leader for all entities and has power over other parties. As a result, the dominant party makes most of the decisions. Trust in the coordinated relationship is limited to the fear of the consequences of not meeting the other party's obligations. These consequences could be punishments or loss of reputation. There is a lack of competency and trust in a coordinated relationship, because the dominated partner provides its partner with performance specifications and checks that they meet these specifications. Information sharing takes a wider scope than communicative relationships to include all entities involved in the supply chain, including wider types of data such as production and process-related information. The coordinated relationship has a moderate type of goal congruence, meaning that entities in the supply chain have different goals, but that there is some compatibility between the partners' goals. This moderate goal compatibility could be attributed to the fact that the dominant party imposes its objectives on the dominated entities; therefore, they are forced to change their objectives to match the dominant entity.

A collaborative relationship has shallow interdependence, meaning both parties coordinate to accomplish their goals (Sheppard & Sherman, 1998). In this type of relationship, both parties agree on a set of objectives and use their specific assets to ensure sustainable competitive advantages (Lejeune & Yakova, 2005). Here, both parties engage in the decision-making process and have an equal say in this decision-making. Additionally, this decision-making can be centralised in a way so each party possesses unlimited decision power for certain functions. Alternately, it can be decentralised, so that each party is engaged in the decision concerning all functions (Lejeune & Yakova, 2005). In the collaboration relationship, trust takes two forms: reliability and competence, meaning that partners reliably deliver its commitments, and that they have the ability and capacity to meet these commitments. This type of trust between partners occurs due to repeated transactions as they develop their relationship. Therefore, the buying firm becomes confident that their supplier can maintain quality standards with no need for monitoring. Thus, this reduces transaction costs by decreasing the number of audits and inspections. In collaborative relationships, information is widely shared between all entities in the supply chain, including other parties who are not involved directly. This information sharing allows all entities to be aware and suggest or make changes when needed. However, in some parts of the supply chain the information sharing is limited to certain data, because the functions are managed in a decentralised manner and the information is known locally. Goal congruence in collaborative relationships is moderate because not all objectives are aligned between all entities; in focused functions goals are strongly aligned between all entities, whereas in non-focused functions there is a lack of alignment. This could be attributed to insufficient incentives or the way the incentives are designed. The lack of objective alignment in some parts of the supply chain could impact the aligned objectives, and might also result in opportunistic behaviour.

The coopetitive relationship is derived from a combination of two concepts: cooperation and competition, which states that competitors can benefit more when they work together. The coopetitive relationship is characterised by deep interdependence, which suggests a wider range of relationships between parties and greater mutual dependency. The decision making process in coopetitive relationships is similar to the collaborative relationship, where all entities contribute to the decision making equally, and agree on a set of defined objectives. Levels of trust in the coopetitive relationship is also similar to the collaborative relationship, where trust in reliability and competence exists, but here, goodwill trust also exists, which means there is openness to sharing critical information with entities in the supply chain as well as the belief that parties will always act non opportunistically when there is a chance of opportunism. Goodwill trust is needed in a sophisticated project, such as a project involving joint technology development, because it is difficult to consider every aspect of the work in a written contract. Therefore, goodwill trust plays an essential role in preventing opportunism. In the coopetitive relationship, information sharing is wider than the previous types of relationships, as it includes confidential information and a wider community, such as information exchange with competitors on inventory management. This type of relationship is associated with a true goal compatibility, which states either objectives are agreed upon from all entities, or if there are differences, goals can be achieved by working together to realise the supply chain (**Table 1**).

2.5. The Impact of Project Characteristics on Choosing Relationship types

There is no ideal type of contractor-subcontractor relationship. For instance, a company might have an adverse relationship with x subcontractor, and a collaborative relationship with y subcontractor. Moreover, a firm can also have different relationship types with the same subcontractors, influenced by a number of factors such as the type of project and the proportion of labours involved in the project (Lee et al., 2009).

According to Lee et al. (2009) the type of the subcontracted work has a great influence on the contractor-subcontractor relationship type. They state that the subcontractor's work can be classified by two factors; the proportion of labour involved in the project and the degree of standardisation. In a project that requires a large proportion of labour and a high degree of standardisation the adverse relationship is favourable, because highly standardised activities reduce the complexity between the contractor and subcontractor, as well as reducing the coordination costs and managerial effort. As a result, less transaction costs occur

Basic types	Middle types	Broader types
Macneil's (1980) Discrete transactions VS relational exchanges	Mudambi and Helper (1998) Close but adversarial' relationship	Webster (1992) Discrete transactions, repeated transactions, long-term relationships, buyer-seller partnerships, joint ventures/strategic alliances, network organisations, and vertical integration
Helper and Sako (1995) Exit relationship/adversarial and voice relationship/ collaborative	Dyer et al. (1998) Durable arm's length relationship	Lejeune and Yakova (2005) Communicative, coordinated, collaborative, and competitive relationships

Table 1. BSR relationship typologies from a relational perspective.

between the contractor and the subcontractor, leading to profitable relationships (Lee et al., 2009). However, the relationship is desirable when a project has a high degree of customisation and there are low proportions of labour involved in a project partnership. This can be attributed to the fact that the highly customised project requires a close relationship to ensure a good performance. However, when the amount of labour increases, the contractor will put more effort in a collaborative relationship to manage the subcontractor than the adverse relationship. As a result, managerial costs increase (Lee et al., 2009).

3. Research Methodology

The purpose of this research is to study the perceptions surrounding contractors and subcontractors in the Saudi Arabian construction industry. It aims to identify the type of relationship between the contractor and their subcontractor. **Figure 2** outlines the methodology used to answer the research questions (see **Figure 2**).

Collis and Hussey (2009) define methodology as the "overall approach to the entire process of the research study". Saunders et al. (2012) view the research methodology as an onion, where some layers have to be "peeled away" before answering the research questions. These layers are the research philosophy, approach, methodological choice, strategy, time horizon, and techniques and procedures (**Figure 3**). These stages are essential elements of determining the research methodology for a particular research area. Despite the fact that there are other classifications and categorisations of these stages, this research used Saunders et al.'s (2012) classifications as it provides a clear and explicit guideline to identify the applicable methodology to answer the research questions.

3.1. Research Philosophy

There are two research paradigms that dominate the social sciences. These are interpritivism and positivism philosophies (Veal, 2005: p. 24). This research adopted the interpretivist view, because this view holds the belief that reality is multiple and socially constructed, meaning it may change from one context to another. This view contrasts with the philosophy of positivism, which has a single view of reality and assumes that it is consistent. According to Black (2006), the interpretivist approach has a strong and powerful ability to understand the complexity and meaning of a phenomenon. Additionally, it also helps in understanding the social context of a phenomenon and how it can influence and be influenced by its social environment (Rowlands, 2005).



Figure 2. Research methodology.





Figure 3. The research onion by Saunders et al. (2012).

3.2. Research Approach

According to Saunders et al. (2012), there are three types of research approaches. These approaches are deductive, inductive, and abductive. The deductive approach is concerned with developing a set of hypotheses to test an established theory. Such an approach is widely used in natural sciences, where explanation is based on laws that predict the occurrence of a phenomenon and try to control it. An inductive approach is concerned with generating theory based on the data collected from the field. This approach is often associated with a qualitative method. The findings from a small sample are used to make generalisations as well predict new findings. This is in contrast with the deductive approach, which is locked by the developed hypotheses and new knowledge cannot be used. The third approach is the abductive approach, which is a combination of the two earlier approaches to overcome their weaknesses, which are the ambiguity of choosing a theory to be tested through creating hypotheses for the former approach, and the lack of data to build a theory by the second approach. This approach aims to generate a theory or modify an existing theory by using the data collected to explore phenomena and use these data to identify themes and patterns, placing them in a conceptual framework and testing it by collecting new data. Saunders et al. (2012) argue that the choice of the research approach depends on many factors, such as the amount of existing literature. A topic that is widely covered by existing literature is likely to apply a deductive approach, as it enables the research to produce hypotheses and test an existing theory. However, a topic that is new and has little pre-existing literature is more likely to follow an inductive approach, to generate and analyse data to build a theory. A topic that has been covered widely by literature, but has little literature in the research context is more likely to adopt an abductive approach, as it will enable to the research to modify an existing theory to fit that particular context. Therefore, for this research, an abductive approach was followed, as little research has been previously conducted in the Saudi context.

Easterby-Smith et al. (2008) argue that the choice of the research approach is important for three reasons. Firstly, it allows the researcher to select the appropriate design to answer the research questions. Secondly, it helps the researcher understand which strategies and choices are best for this particular research. For instance, for research that seeks to understand why something is happening rather than what is happening, an inductive approach may be the most appropriate method. Finally, understanding the difference between different approaches allows the researcher to adjust the research design to overcome constraints. Prior knowledge of different research approaches enables the researcher to adapt a research design that can cope with constraints.

3.3. Research Methods

For this research, the qualitative method has been found to be the most suitable method because "qualitative research is associated with an interpretive philosophy" (Denzin & Lincoln, 2005, cited by Saunders et al., 2012). This method is interpretive, because the researcher is involved in the research and needs to make sense of meanings expressed by the participants. Furthermore, this method is appropriate for studying the contractor and subcontractor relationship from a real-world context, as it allows the researcher to understand the nature of the relationship from their point of view. According to Denzin and Lincoln (2000), an advantage of applying qualitative research in social science is that it explains how social experiences are created, and provides an illustration of how this experience within a particular context has been created, making it visible. This method was found to be superior to the quantitative method because it enables the researcher to understand both parties' perceptions of their relationship. For example, this includes how each party defines trust and commitment in their relationship, which cannot be captured through a quantitative approach. Moreover, it is noticeable from the literature review that most of the research used quantitative methods, which only capture statistical findings, rather than an explanation of the meanings of that finding.

3.4. Research Strategy

Research strategy is an important stage in moving forward through the research, as it determines the technique of data collection with regards to the research objectives and questions with the time and resource availability (Saunders, Lewis,

& Thornhill, 2007). According to Saunders et al. (2012), there are a number of research strategies that a researcher can follow to conduct research, such as a case study, survey, experiment, action research, and archival study. In this research, the case study strategy was found to be the most suitable method to answer the research questions, as it provides insight and profound understandings to the studied issues (Eisenhardt & Graebner, 2007). Moreover, the case-study strategy was found to be superior to the other strategies as it enables the researcher to explain and explore new issues within the construction industry because of its ability to answer "why" and "how" questions (Yin, 2003). Additionally, this strategy has the ability to investigate a phenomenon within a real-life context, particularly when the boundaries between an issue and its context are not sufficiently clear (Yin, 2009). Moreover, Proverbs and Gameson (2008) state that a case study is the most appropriate strategy through which to study an industry such as the construction industry because it involves different types of firms and organisations. They also state that the application of case study strategy in the construction industry is limited, which agrees with Dainty's (2008) identification that the quantitative research method is the dominant method within the field. Studying the contractor-subcontractor relationship requires such a strategy because the buyer-supplier relationship has unclear boundaries. Therefore, it needs elaboration on certain issues such as trust and commitment, to allow the researcher to understand the issue from both parties' point of view.

Using Yin's (2009) classification of a case study, the research used multiple case studies. They are multiple because the study focuses on more than one company (Yin, 2009). The rationale behind using multiple case studies is to compare and contrast the findings from different cases, and to identify whether literal replication can be achieved (Saunders et al., 2012). The multiple cases were applied to identify a common pattern across cases, to increase the "genera-lisability" of the findings (Miles & Huberman, 1994).

The research was conducted on four construction companies that specialise in infrastructure development. The first company is the main contractor (C1), and the other three firms are its subcontractors (S1-S3). All respondents are located in the city of Jeddah, Saudi Arabia. The number of cases was determined according to Eisenhart's (1989) argument that the maximum number of case studies should not exceed seven because a person cannot mentally process more than this number. The qualitative approach uses non-probability sampling techniques, including purposive and snowball sampling methods. For this research, the purposive selection method was used. The selected companies were chosen mainly because they operate in the same industry, and have worked together for a long time. Thus, knowledge and experience will provide rich information and valuable findings for this study (Table 2).

3.5. Data Collection

There are a number of techniques that qualitative research uses to collect data or

Companies	Years in business	Number of projects with C1	Employees
Contractor	40 years		3000
Subcontractor 1	9 years	10 projects	200
Subcontractor 2	11 years	24 projects	500
Subcontractor 3	7 years	6 projects	100

Table 2. Respondents' profile.

information, such as interviews and focus groups. The semistructure interview method is appropriate for studies that aim to explore new issues or explain phenomena (Saunders et al., 2012). Therefore, the data for this research was collected through semistructured interviews, allowing the researcher to have some flexibility to explore new issues and identify the uniqueness of each relationship. Twelve interviews were conducted in total, three with the main contractor and three with each subcontractor. Participants involved are project managers, commercial managers, business owners, members of top management, and employees involved in the supply chain. The interview lasted between 30 and 45 minutes, and was conducted via Skype due to the geographical distance between the researcher and the respondents. A follow-up phone call was used to either gain more information or clarify issues.

The research question is to understand the nature of the relationship between the contractor and their subcontractors in the Saudi construction industry. Both parties were asked to describe their relationship regarding the five dimensions extracted from the literature review, which are trust, commitment, information sharing, decision making, and goal congruence. Participants were asked to be more specific in their description, for example to state their definition of trust and rate it from one to seven, where seven is a high level of trust.

Several problems were encountered during the data collection phase. The first issue was that the respondents were very reserved when providing the researcher with some of the key information because of the main contractor's power. However, the research managed to overcome this challenge by gaining the trust of the participants, particularly by declaring full confidentiality of the information given. The second issue was that participants had busy schedules, thus interviews had to be re-scheduled a number of times.

3.6. Analysis

The data was analysed using a number of steps. First, the interviews were recorded with an audio recorder and note-taking. Next, the data was transcribed using the data sampling technique, which indicates that only transcribing data that are relevant to the research. This method, as stated by Saunders et al. (2012), is an alternative transcription technique that helps to reduce the time taken to transcribe an audio recording. The collected data were transcribed using a combination of the audio recording and the researcher's observation, as observations provide information that are not stated by the participants, such as voice tones and facial expressions. The interviews were transcribed manually as the interviews were conducted in Arabic. This is because transcription software is either expensive or does not provide an accurate transcription. This is especially important because spoken Arabic is different to written Arabic, and the language varies from country to country unlike the English language, and most of the research participants are from different Arab countries, such as Egypt and Yemen. Following this step, the data was categorised using an open coding approach to identify common themes that are derived from the collected data (See **Table 3**). An axial coding is then used to identify a relationship between the categories that have developed from the open coding (Strauss & Corbin, 1994: pp. 273-285).

4. Reliability and Validity

Despite the stated advantages of using case study Case study strategy as research design it has a number of limitations that worth to acknowledge. Case study has been has been widely criticised for its bias of case selection which influence the findings and conclusion of the research (Yin, 2003). It also has been criticised for its inability to generalise the findings because it use small number of subjects particularly for single study (Yin, 2003). Moreover, case study has been also for its criticised lack of rigour and biased interpretation of data by the researcher (Yin, 2003).

However, there are two arguments on how overcome these limitations and to judge the quality of qualitative research. Yin (2009) argues that the qualitative method can be validated using the same criteria as the quantitative method, because the outcome credibility is central to all research. Others such as Lincoln and Guba (1985) argue that the quality of the research can be enhanced by different criteria, such as credibility, transferability, dependability, and confirmability. For this research to ensure the data validity, the researcher used Yin's (2009) approach for validating qualitative data. Yin (2009) provides four tests to ensure rigour, which are constructed validity, internal validity, external validity, and reliability. Constructed validity is about identifying the right measurement for the concepts being studied. The concepts of this research are identifying the

Table 3. Open and axial codes for RQ1 sample table.

Open code	Axial code	Properties
Contractor view of trust	Trust is related to quality	Monitoring increase costs and time consuming
Subcontractor view of trust	Trust is related to payments	Impact the work progress and cause conflict

nature of the relationship between the contractor and their subcontractors, and identifying the factors that affect their relationship through the five dimensions and the top five factors that influence the relationship, which has been previously stated. Internal validity is about identifying a relationship between two variables where one leads to the other. According to Yin (2009) this validation criteria is only applicable for explanatory studies, and not for exploratory or descriptive studies. External validity is concerned with the generalisation of the findings to other firms or countries. Therefore, to be able to generalise the findings of this study, the findings were replicated between the cases to increase the external validity. Reliability is concerned with presenting the research process, so it may be replicated by other researchers to produce the same findings. To increase the reliability of this research, the data collection techniques and the investigation process were explained step by step for future researchers that may seek to replicate this study.

5. Ethical Considerations

Ethical issues are considered an important success factor in this research. Two important ethical issues were considered in the research, that of participants' consent, and confidentiality. For the consent issues, the researcher acquired both written and verbal consent from participants any participants who refused to provide either written or verbal consent were eliminated from the research. With regards to confidentiality, it was made clear to participants that the information collected will not be shared with any other parties. Moreover, at the beginning of each interview it was made clear to the participants that both their name and their company name will be kept anonymous, and any documents they provide will not be used against them.

6. Findings

The participants were asked to describe their relationship in general, and then to describe and rate the level of their relationship in relation to five dimensions: trust, commitment, decision making, information sharing, and goal congruence. The interview findings from both perspectives are summarised below.

6.1. Trust

From the contractor's point of view, it was found that trust in a subcontractor was related to the quality of work done; where trust is defined as delivering the project to the agreed quality standard. The contractor participants stated that they have a large numbers of projects, and this makes it difficult to monitor all of the subcontractors' work. Therefore, the contractor endeavours to ensure that the subcontractors are trustworthy.

This high trust placed on the subcontractor's competency and capabilities in delivering the project to the agreed standard has developed from working with

the subcontractor on previous occasions; past experiences play a key role in the level of trust, either positively or negatively.

The subcontractor participants have a different definition of trust from the contractor participants; some of them have stated that trust is simply about being paid according to what is stated in the contract. Whereas, others have expressed that trust is about keeping promises.

All subcontractors have agreed that the level of trust between them and their contractor is low and it is limited to the contract points. However, some of the participants have stated that the level of trust depends on many factors, such as the personal relationship developed with business owners and project managers. A participant from S1 mentioned that there is a lack of trust between their entity and the main contractor because the contractor does not meet commitments most of the time. In contrast, participants from S2 were more confident in their relationship with the contractor C1, and they have stated that trust is very high between both parties due to prior experience with C1. The level of trust between the main contractor and its subcontractors was rated by the contractors rated the level of trust between them and the main contractors rated the level of trust between them and the main contractors s3.

6.2. Commitment

When the contractor participants were asked about their definition of commitment, they have stated that it is about delivering projects on time to the agreed standard. They also have stated that commitments tend to be short term between the contractor and their subcontractor, and it is more about operational issues rather than strategic ones. From the contractor point of view the degree of commitment depends on many factors, such as long-term orientation and future projects. Thus, when the subcontractors have future plans to develop long-term relationships, they tend to be more committed than others.

We expect our subcontractors to meet their promises. However, most of the time they fail to do so and projects delays [are the best example of low commitment].

The level of commitment between the main contractor and subcontractors was rated by the contractor as follows: three for S1, four for S2, and two for S3.

From the subcontractors' perspective, commitment by the contractor was illustrated through payments according to the project progress—not according to money availability. The subcontractors have stated that payments are the major issue of dispute between them and the main contractor; it impacts their ability to continue with the project, as they do not have the ability to buy construction materials and pay their labourers. A participant from S3 said:

Subcontractors rated the level of commitment between them and the main contractor as follows: three from S1, four from S2, and two from S1.

6.3. Decision-Making

The decision-making process between the main contractor and subcontractors had mixed responses in regard to how much each party should be involved in the process. The contractor sees joint decision-making as not essential; the standards are clear and the subcontractors have knowledge of the requirements made by the owner, therefore, it will only cause unnecessary effort. An interviewee said:

The contractor also stated that the client is not often aware of subcontractor involvement in the project, because some of these subcontractors have a low rate, meaning they are not capable of working on particular projects, which means the contractor is being deceitful in using the subcontractors. Therefore, involving the subcontractors in decision-making would create major disputes between the contractor and the project owner—which most of the time is the government—as a result the main contractor may lose some of their current contracts and future projects. When asked about the degree of subcontractor involvement in the decision-making process, the contractor rated all subcontractors at two; in some occasions it increased to four if the subcontractor had experience in the project area.

When the subcontractors were asked about their involvement in project decision-making processes, all of them concurred on the lack of joint decisionmaking, as well acknowledging that the contractor directed the majority of decisions. One of the interviewees stated:

Joint decision-making may be absent in the main contractor-subcontractor relationship, however the act of making suggestions is open to subcontractors. For example, participants from S1 stated that they have made some suggestions to the main contractor that were accepted by the owner and the contractor. The suggestion involved adjusting a road direction to make it shorter and straight. The contractor engineers agreed to this suggestion, and it was beneficial for both the contractor and the local residents. The subcontractors rated involvement in decision-making process as follows: four from S1, three from S2, and just one out of seven from S3.

6.4. Information Sharing

Both contractor and subcontractors agreed on the lack of information sharing in their relationship. Nevertheless, there is a difference in the level of information sharing and the intentions behind withholding information from both perspectives.

The contractor participants stated that there is lack of information exchange between them and their subcontractors, and they attribute this to a number of different reasons. First, there is a lack of communication due to subcontractors' employees being unfamiliar with using information technology—such as emails. Therefore, there is a strong reliance on the use of hard copies to share project information, which slows the information exchange process. Another reason is that contractor's main point of communication, the majority of the time, is either the business owner or the project manager. Most of the information that can be shared is not shared with the other employees due to lack of transparency in the subcontractor firms. Moreover, the contractor has stated that it is the nature of the industry that the subcontractor is provided with the required design, structural, and material data and they have to execute accordingly with no further information.

The main contractor participants were asked about the degree of information sharing between them and their subcontractors, and the reason for withholding information from subcontractors. They stated that information exchange depends heavily on the relationship with the business owner or the project manager. Despite reservations, they provided an average ranking of four out of seven for all subcontractors. There is an exception for those subcontractors who have worked with the contractor for long time. Participants also stated that they only share the data required to complete the project withholding any information related to the client, such as the cost of the project.

Subcontractors also agreed on the issue of lack of information exchange, attributing it to the same reasons. However, they have provided a further reason: lack of transparency between them and the main contractor. For example, a participant from S3 stated that the main contractor deliberately withheld information so as to be able to manipulate the client. The project manager of S3 stated that the contractor manipulated the client with false project progress, either to maintain its reputation or to acquire extra money from the client.

When the subcontractors were asked about the reasons for hiding information from the main contractor, they stated that most of the information they withhold is related to quality issues. Declaring such issues would influence the relationship with the main contractor and impact on their chances to acquire future projects from the main contractor. All participants rated the level of information exchange between the contractor and their subcontractor as between 2 - 4 out of seven.

6.5. Goal Congruence

The main contractor is fully aware of the subcontractors' objectives. However, main contractor participants have stated that goals are not fully aligned between both parties, attributing this to a lack of alignment to traditional construction procurement. This absence hinders the possibility of improving project value and integrating the subcontractors with the rest of the supply chain. The main contractor participants mentioned that they sought to align all goals with the subcontractors, since goal congruence would help protect them from possible opportunistic behaviour from the subcontractors. Goal alignment would help to strengthen cooperation over time; however, participants have stated that their own contractor goals should be the main focus, not the subcontractors' goals. When they were asked to what extent do their goals align with their subcontractors, contractor participants stated that it differs from subcontractor to subcontractor. Goal alignment depends on different factors, such as trust, subcontractor intentions of a long-term relationship, and the financial capability of the subcontractor. Nevertheless, the participants rated goal alignment at three out of seven.

The subcontractor participants similarly agreed on a lack of goal alignment between both parties. Yet they have stated that they are not aware of all the main contractor objectives. They are purportedly aware of around of 50 per cent of the contractor's goals, most of them consisting of operational goals. These goals include the innovation and development of methods to enhance productivity and cost effectiveness, and the reduction of accident frequency towards achieving zero accidents (which is already one of the subcontractors' goals). All subcontractors agreed that the main contractor obliges them to adopt or adjust some of their objectives to align with the contractor's objectives. One of the interviewees from S3 stated:

The rated goal alignment between contractor-subcontractor, from the subcontractor perspective is as follow: three out of seven from S1, four from S2, and three from S3.

To summarise, this chapter has recorded the findings collected from the 12 interviews with both contractors and subcontractors. For the first phase of the study—identifying the nature of the relationship between the contractor and its subcontractor—the data presents that each party has a different definition of trust in regard to its relationship, and the level of trust varies from both perspectives. The findings also show that the contractor and its subcontractors define commitment in their relationships differently, as well as the degree of commitment by each party. Most of the decision-making is made by the main contractor; rarely do subcontractors feel free to make suggestions that may improve the project and the main contractor is open to such suggestions. Information is limited to the project owner and any further information is shared only when it is needed. Goals are not fully in alignment between the main contractor and its subcontractors.

7. Discussion

To answer the first research question, the type of relationship is identified by comparing and contrasting the research findings with the relationship characteristics noted previously in the literature review chapter. These are trust, commitment, decision-making, information sharing, and goal congruence.

Trust is at the core of these relationships. Therefore, significant trust is a strong indication of a successful relationship between a contractor and its subcontractors, and verse versa. The trust between the primary contractor and its subcontractor (from the contractor's perspective) is related to performance issues, such as poor quality and work delays. The primary contractor has high trust its subcontractor's capabilities and competencies, but not in a subcontractor's potentially dishonest behaviour, such as speeding the work up in a low quality manner to bid for new projects. On the other hand, subcontractors have different definitions of trust, which is often related to due payments to the contractor; as such, the practice of withholding money is often related to the primary contractor's financial problems, if these are present. The level of trust between the contractor and its subcontractors is considered to be moderate as a result of the procurement approach of the main contractor, which is based on selecting the lowest price subcontractor and offering short term contracts. Reflecting on the previous studies mentioned in the literature review chapter, low to moderate trust between contractor and subcontractors is associated with three types of relationships: discrete transactional, repeated transactional (Webster, 1992) and coordinated types of relationships (Lejeune & Yakova, 2005). However, based on trust alone, it can be stated that this particular type of relationship tends more toward the repeated transactional relationship type. The reason for this is that at the discrete transactional relationship type the transaction occurs at once and the coordinated relationship is associated with significant dependencies and a lack of competencies, which is not found in the repeated transactional relationship.

The second most important characteristic of the relationship between contractors and subcontractors is the commitment involved therein, i.e., the longterm desire to sustain the relationship. From the research findings, the main contractor defined "commitments" in their relationship with subcontractors as meeting deadlines; this was because the many projects of the primary contractor had been delayed due to the low level of commitment on the part of subcontractors. However, the subcontractors attributed these project delays to deferrals in the contract payment process on the part of the main contractor. A project delay is a method that subcontractors use to pressure the primary contractor into meeting their payment commitments. As such, the root cause of the project delays is payment delays.

The level of commitment between the primary contractor and its subcontractors may be low due to a lack of fulfilling commitments, i.e., making payments and meeting project deadlines. A low level of commitment was found in both the discrete and the repeated transaction relationship types (Webster, 1992). However, due to the reasons previously stated (pure transactions occurring at once and repeated transactions occurring several times in the relationship), it can be stated that the relationship type is repeated transaction, based on the characteristics of the commitments involved.

From the findings, it is clear that joint decision-making between the main contractor and its subcontractors had been absent. This absence of joint decision-making can also be attributed to the nature of the industry, where project specifications are clearly stated by the main contractors and subcontractors are not allowed to change or adjust any part of the work. Moreover, absence of joint decision making may be also related to country-specific cultures, where collaborative work is not encouraged by top management and subcontractors are viewed as competitive parties, rather than complementary entities. The primary contractor's dominant role in the decision-making process can also be attributed to the power and size of the main contractor and its ability to influence subcontractors' businesses and decisions. The absence of joint decision-making is often present in the case of the coordinated type of relationship (Lejeune & Yakova, 2005), where the relationship is viewed as a hierarchy of entities in which one party acts as a leader for all entities, and holds power over other parties. As a result, the dominant party makes most of the decisions.

Information sharing between the two parties (contractor and subcontractor) was identified as low and each party provided reasons for this lack of information exchange. However, low information exchange may be endemic to the nature of the construction industry, as the primary task of subcontractors is to build according to the primary contractor design, and any additional information is viewed as unnecessary. This lack of information sharing may also be attributed to a lack of transparency and communication within the industry, where competition is high and information sharing is viewed as a risk by businesses. Furthermore, it may also be related to the nature of the relationship with business owners and the culture of the organisation involved, since business owners are the primary decision-makers and information-sharing actors in the Saudi construction industry. A lack of information exchange was found in both the communicated and coordinated types of relationships (Lejeune & Yakova, 2005). Nevertheless, this tends to occur more often in coordinated types of relationships, as the communicated type of relationship is limited to transactional information. The coordinated type of relationship has a wider scope for including information sharing of operational information and other entities involved in the supply chain as in the construction industry where different entities are involved.

Both contractors and subcontractors appear to be fully aware of one another's objectives and willing to develop long-term relationships. However, it seems that the relationship between the main contractor and their subcontractors is projectbased, where the contractor works alongside subcontractors in order to complete a project; once the project is completed, the relationship ends and it starts again when the subcontractor is awarded a new project. For this new project, however, the relationship may develop according to the trust and knowledge specification that occurred as a result of previous experience. Goal congruence can be fully achieved if both parties relinquish opportunistic behaviour.

Developing long-term relationships is not easy and can impact on the primary contractor; it will work against its interests to not establish these relationships, as it will lose access to low cost subcontractors, thereby minimising profit margins. Therefore, traditional construction procurement is viewed as the most appropriate method from the general contractor point of view. Moreover, developing long-term relationships and aligning organisational goals require the careful selection of subcontractors who have strong financial capabilities that enable them to cope with changes in the market, and who have the ability to offer low prices over the long-term in order to stay competitive. By developing common goals between the primary contractor and its subcontractors, the potential for both groups to act opportunistically is reduced, as they will seek to accomplish the same goals.

From the findings of this study, some common goals were observed, even if these goals were already the subcontractors' goals or imposed by the main contractor. Therefore, a moderate level of goal congruence was present, which aligns with a coordinated type of relationship (Lejeune & Yakova, 2005).

Due to cost and time constraints, only a small number of studies were conducted involving the dyadic relationship (Terpend et al., 2008). These studies showed significant differences between buyer and supplier views where relationships are concerned (Forker, Ruch, & Hershauer, 1999). For example, Barnes, Naudé and Michell (2007) found that suppliers rate their relationship higher than buyer firms in terms of satisfaction level. In another study by Wilson and Vlosky (1998), buyer firms were found to have higher expectations and lower commitment than suppliers.

In summary, by comparing and contrasting the findings of the research with the previous studies examined in the literature review chapters, it can by stated that there is some similarity with some of the previous studies. For example, for the first research question regarding the type of relationship that exists between contractors and sub-contractors, there is evidence of three types of relationships: discrete transactional, repeated transactional (Webster, 1992), and coordinated (Lejeune & Yakova, 2005). For the second question it seems that the all the factors were found by the researchers were mentioned by previous researches and in particular it is more similar to the studies of Enshassi et al. (2012) and Okunlola (2015).

8. Conclusion

The main purpose of this study is to examine the dyadic relationship between contractors and subcontractors in the Saudi construction industry by studying the types of relationship that exist between both parties.

The types of relationship exist between contractors and subcontractors in the Saudi construction industry. The level of trust between both parties is at a moderate level, possibly due to the traditional procurement approach which is based on the lowest bidder. Commitment was found to be low between the main contractors and their subcontractors; this could be due to the use of short-term contracts preventing the development of long-term relationships. Joint decisionmaking was found to be absent, which was attributed to the dominance of the primary contractor in regard to decision-making. Information sharing between a contractor and its subcontractor was found to be relatively low level for two reasons: a lack of communication due to the traditional approach to handling information, and the perception of risk from sharing information with the other party. Both groups were aware of each other's objectives. However, goal congruence was recorded as being at a low level and did not go beyond the operational level. This could be attributed to the nature of project-based relationships that consists of short-term contracts. All in all, the type of relationship between the main contractor and its subcontractors seems to sit between "repeated transaction" and "coordinated". However, both types are considered to be adversarial types of relationship, involving characteristics such as a lack of trust and low levels of information sharing.

8.1. Research Importance

This research has significant importance for both practitioners and academics. First, the research will contribute to the buyer-supplier literature by providing a dyadic study and showing how the buyer and supplier have different views about the same relationship. Moreover, few studies have been conducted on the buyer-supplier relationship in the construction industry in general and none have been conducted on Saudi Arabia's construction industry. Thus, the research will enrich the knowledge of those interested in the Saudi construction industry.

This research has made a methodological contribution to the field of contractor-subcontractor relationship by using a case study approach, which has revealed explanations of issues that were not explained by previous studies, as most of this research used a quantitative approach concerned with the identification of issues without explaining the impact of these issues on contractor-subcontractor relationships. For example, this study allowed the participants to explain their definitions of trust and commitments, as well as it allowing the participants to explain the impact of interface problems on their relationships.

The practical contribution this research has made is that its findings will provide useful information for both contractors and subcontractors, such as the factors that affect their relationship. Identifying the factors and their effects on their relationships will enable both parties to act to remove these barriers and obstacles that prevent them from developing a deeper and clearer relationship.

8.2. Research Limitations

This research, like any other study, has a number of limitations, which are worth acknowledging in order to offer guidance to future researchers on how to overcome these limitations. First, using a case study approach could have impacted on the findings, as the researcher acted as the main instrument of data collection. Therefore, there is some bias in terms of data collection and the interpretation of the results. Thus, a triangulation method is recommended in order to check the consistency of the findings from different methods, such as surveying a number of other subcontractors to increase the validity and the reliability of the findings. The second limitation is that the selected case studies were restricted to the context of the city of Jeddah and the construction industry. Thus, while the findings are valuable for this region and this specific industry, future research may need to select companies from different regions and industries in order to develop more comprehensive findings. Finally the findings of this research might have been influenced by the falling oil price. The drop in oil price might have impacted the relationship between the companies, as uncertainty increases when oil prices decrease because the government is the major client for most projects, and as a result most projects stop.

8.3. Recommendations for Future Research

In this study, the focus of this research has been on gaining insight into the type of the relationship that exists between contractors and subcontractors, and the factors affecting this relationship. For future research, it is recommended that a study of the barriers and obstacles that prevent the developments of collaborative and long-term relationships between the contractors and their subcontractors should be included.

8.4. Recommendations for Practitioners

Practitioners are recommended to move from the adversarial types of relationship to more close and collaborative relationships, which could enhance their capabilities and competitive advantages. This is because the adversarial types of relationship are often associated with negative characteristics such as low levels of trust and commitment, a lack of information sharing, and the absence of joint decision-making. With the development of the construction industry around the world, collaborative relationships seem to have better results than others, such as the T5 project in UK. Practitioners need to increase their levels of trust and commitments by offering long-term contracts and guaranteeing future projects to its subcontractors. This will increase the loyalty of the subcontractors. Therefore, they will improve their performance, which will result to less delayed projects. The lack of information sharing and absence of joint decision-making can be improved by using two-way communications and also by using technology as a tool for information exchange. This will increase both the speed and the scope of shared information, which will lead to less misunderstanding and problem being solved much quicker and more effectively. Regarding joint decisionmaking, the main contractors should be open to the suggestions made by the subcontractors and allow the subcontractors to change the project specifications if they are not applicable, as they have the specialist knowledge and experience of the field, which may lead to better quality projects with less delay. Finally, for goal congruence to improve, if the four previous problems are solved, which are lack of trust, commitment, information sharing, and the absence of joint decision-making, goals will be aligned easily, especially if the subcontractors have long-term contracts and the contractor-subcontractor relationship starts to take a long-term shape.

Note

This article is based on the author's master thesis (Almutairi, 2016) that was conducted at the Alliance Manchester Business School.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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