

The Challenges of Corporate Governance Systems for Construction Project Management

التحديات المتمثلة في أنظمة حوكمة الشركات لقطاع إدارة المشاريع الإنشائية

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Executive Summary

The building and construction industry has been evolving for decades. Researchers claim that corporate governance plays a significant role in balancing the social and economic goals of the organization. United Arab Emirates has been in the forefront in investing in the construction industry. However, despite the growth in the area, the industry continues to face different challenges. Researchers have associated the challenges with poor corporate governance. Although the industry has contributed immensely in the growth of UAE, various challenges have hampered its growth and development. Therefore, the study identified and proposed the solution to the challenges facing the construction industry. This is after using both the primary and secondary data in order to get make an in-depth conclusion. Both quantitative and qualitative methods of collecting data were used. Data analysis was done using inspection analysis. The study noted that different aspects must be taken into consideration when dealing with this sector. Effective project management is significant in ensuring that there is uninterrupted flow of functions during construction project. With the increasing levels of globalization resulting from liberalization of markets, efficient flow of information, and integration of economies, the industry is turning its attention to the global market. However, project failures have been tarnishing the reputation of the sector. Poor corporate governance strategies in the risk management and project management are associated with the failure. In addition, poor evaluation and finance management has also played a significant role in project failure. Lack of inclusiveness in decision making has been taking a toll on the sector. The top management has not been involving other subordinates, an aspect that has been affecting their performance. On the other hand, poor communication and ethics have been affecting the success of the projects. This is due to lack of support by the community and other crucial stakeholders. Nature of the work has also been a great challenge. The industry is more seasonal. This makes it hard to manage and operate different activities that require continuity. Safety concerns have also been hampering the growth and development of the sector. Furthermore, strict legal and environmental issues are forcing the sector to implement strict measures which consume time and resources. The increasing regulation of the sector and high political pressures from individuals with special interests has made it hard for the sector to develop. Lastly, poor leadership and language barrier is also an important factor that has been affecting the success of the sector. Therefore, it concluded that the sector must involve all stakeholders in order to avoid internal factors that affect the sector. In addition, the industry should draft new regulations and seek an audience with government and other regulators in order to discuss the way forward.

الخلاصة

رأى الباحثون في مجال هندسة البناء والتشييد والتي جرت لعقود من الزمن أن هناك دوراً هاماً تلعبه المنظمات في مجال حوكمة المنشآت والتي من شأنها تحقيق التوازن بين أهدافها الاجتماعية والاقتصادية وكانت دولة الامارات العربية المتحدة سباقة في القطاع العمراني حيث أنها احتضنت الأستثمار بأنواعه في المجالات كافة وفي مجال هندسة البناء والتشييد خاصة، وبالرغم من النمو والتطور اللذان شهدته البلاد والذي كان له دوراً أساسياً في تقليل نسبة التحديات التي تواجه القطاع، إلا أن هناك مازالت تحديات مختلفة من شأنها التأثير على قطاع الصناعة والمنشآت وقد رجح الباحثون تزايد نسبة التحديات بضعف حوكمة الشركات والمنظمات .

استطردت في هذه الدراسة الى عرض التحديات المختلفة في قطاع المنشآت ووضع الحلول التي قد تساهم في إنجاح القطاع والسير قدماً. استخدمت البيانات الأولية والثانوية معاً والتي جمعت بالطريقتين النوعية والكمية وذلك للحصول على استنتاجات أكثر دقة وتعمق لتخدم القطاع، حيث قمت بتحليل البيانات وجمعها للحصول على هذه الاستنتاجات التي تناول التحديات المختلفة والحلول المناسبة للقطاع. وأشارت الدراسة الى جوانب مختلفة في القطاع والتي يجب أن تؤخذ بعين الإعتبار في قطاع إدارة المنشآت .

إن الإدارة الفعالة لها دور كبير في ضمان التواصل المستمر بين جميع الموظفين والمهام المنوطة لهم في المشروع . وكذلك زيادة مستويات العولمة الناجمة عن تحرير الأسواق وتدفق المعلومات والتكافل بين الإقتصاد والصناعة أدت الى التحول للإهتمام بالسوق العالمية . وإن من أهم الأسباب التي قد تشكل خطراً على أي مشروع ، الأستراتيجيات الضعيفة التي تضعها بعض الشركات في إدارة المشاريع وفي إدارة مخاطرها والتي يترتب عليها ضعف الحوكمة وعدم الشمولية في صنع القرار الشيء الذي قد يؤثر سلباً في القطاع. وإن لضعف التواصل بين المرؤوسين ورؤساءهم دور كبير في إبهام الصورة الحقيقية للمشروع ومن ثم الصورة التي قد تصل للإدارات العليا والتي ستؤثر على عملية إنجاح المشروع من جهة أخرى.

بعض الشركات قد تواجه تحدياً من نوع آخر وهو قلة الدعم سواءً من قبل المجتمع أو الجهات المعنية الأخرى، كما أن موسمية الصناعة لها حصة من التحديات خاصة في إدارة وتشغيل الأنشطة التي تتطلب الأستمرارية .

هناك تحديات قد تتعلق بطبيعة العمل وبمخاوف السلامة علاوة على ذلك المسائل القانونية والبيئية الصارمة والتي تجبر القطاع لتنفيذ تدابير صارمة من شأنها استهلاك المزيد من الجهد والوقت . كما إن سوء القيادة ومعوقات اللغة يشكلان تحدياً لتطوير القطاع ونجاحه وذلك وبعد التطرق لبعض التحديات التي قد تواجه القطاع فإن هذه الدراسة أشارت الى أهمية التواصل بين القطاع المؤسسي وأصحاب القرار للتغلب على التحديات الداخلية ضمن القطاع وجميع السلطات المعنية و الجهات التنظيمية وإشراكهم في إتخاذ القرارات التي من شأنها سن القوانين واللوائح التي قد تؤثر على نجاح قطاع المنشآت وإدارتها.

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Introduction

The building and construction industry is a quite a distinct industry, with a notable difference from other industries. The differences range from the highly physical nature of most of products, the organization of the process of building and construction, as well as the structure of the whole industry (Bekker, 2008, p. 32). Therefore, as much as corporate governance strategies are common in most industries, there are differences in corporate management strategies for the construction industry. These differences also influence the project management sector within the construction industry (Aliza et al., 2011, p. 14). This research aims at highlighting the challenges of corporate governance systems in construction project management, with focus placed on the UAE.

Governance in most business organizations is referred to as corporate governance. This refers to the systems of directing and controlling corporations in the modern business world (Contandriopolus et al., 2004, p. 627). Corporate governance has grown to become one of the factors, which have an immense influence on the failure or success of corporations worldwide. In most industries, corporate governance is the work that is carried out by the board of directors, whose actions are closely monitored by the shareholders and other stakeholders. Therefore, corporate governance involves responsibilities such as attraction of human and financial capital, as well as generation of economic values of a long-term nature for all shareholders (Crawford and Cooke-Davies, 2005, p. 45).

Corporate governance is also described as a set of internal rules, which show the allocation of rights and responsibilities as shared by the board of directors, the management, shareholders and stakeholders (Davis, 2007, p. 383). Most of the products of the construction industry have a huge volume. In addition, these products are usually located in one location, and

they are often not transportable. They also vary in size and style to include the needs of the customer. The construction process of buildings usually involves three sets of people. Therefore, the project management strategies in the construction industry must pay attention to all these sets of people. These include the designer, the client and the contractor (Dunovic, 2010, p. 145).

The client is the initiator of the project in most cases. The client seeks the expertise of the designer in the initial phase of the project. The designer who has been chosen by the client engages the client in the process of nominating a tender for equipment selection for the construction process (Essig and Batran, 2005, p. 221). The client can now approach a bank for a loan after completing and closing a tender. This process is crucial because it provides the client with all the documents that are necessary for applying for a loan from a credible bank. This process is followed by the approval of the loan by the bank. The designer uses the financial construction from approval of the loan and the selection of equipment as a basis for planning all the activities of the construction work (Flyvbjerg et al., 2003, p. 24). The process is usually followed by creating a tender for contractors and, in most cases; this process involves a consideration of many separate firms.

A legal bidding procedure is followed by each contractor competing for the awarding of the tender. After a contractor has been selected, the designer proceeds to make a more detailed and final plan of activities for the construction work process (Heide, 2003, p. 32). The chosen contractors have a duty, and responsibility to submit and adhere to the established plan. This means that the power of the contractor is limited as the contractor is not able, under any circumstance, to change, reject, or add anything to the planned actions (Hope, 2005, p. 283). This process normally applies to the bespoke process of building. However, in the off-the-peg process

of building, the contractor is usually the responsible person for choosing the designer, as opposed to the client (Essig and Batran, 2005, p. 221).

The system of work in the construction industry relies heavily on concise projects. The organization of each of the projects in the construction industry involves the inclusion of many subcontractors, who operate with different pressures and objectives. Therefore, project management plays a vital role in the organization of the process of construction to make sure that there is an uninterrupted flow of all the functions in the construction project. This involves taking control of the time, costs, as well as the quality of actions, which are undertaken in the construction process (Hope, 2005, p. 283). While the work of project management may be temporary and limited to a set amount of time that depends on individual construction process, it is subjected to an intensive and constant pressure of cost and time constraints, a careful process of awarding tenders to the lowest bidder, as well as the construction of competitive tendering (Ive and Chang, 2007, p. 677).

The construction industry considers both large, as well as small firms. The sizes of these firms can be categorized according to the number of employees where large firms are considered as those with more than 20 employees. Smaller firms, on the other hand, are usually constrained to a limited number of employees ranging between five to twenty employees (Klakegg et al., 2008, p. 27). Most of the largest construction firms usually take the form of corporations, which indicate that they need to engage in corporate governance. While the traditional concept of thought indicates that small firms in the construction industry do not require any form of corporate governance, recent studies indicate that corporate governance may be a necessity for all firms in the construction industry regardless of their sizes (Knapp et al., 2011, p. 295). This need originates from the pressure faced by small construction companies to implement major

innovative strategies aimed at creating new products, as well as processes that enable them to respond faster to the rapidly changing market demands. Corporate management is also necessary for development of a new strategy for management (Levitt and Henisz, 2009, p. 58).

Current construction corporations are turning their attention towards the global market, and this requires the involvement of locals who live on the offshore sites of construction (Jacoby, 2005, p. 69). This indicates that there are numerous factors of consideration in project management and project governance has to play a key role in aligning all these factors with the plan of activities as devised by the project designers. Project governance incorporates factors such as project objectives, project management, reporting, and disclosure and project sponsorship (Loeffler, 2003, p. 19). Based on the individuals who bear the contractual risks of the occurrence of the above events, they all have contractual remedies. However, corporate governance is accused as being the source of most of problems, including delays, which occur in the event poor corporate management, in construction projects (Maijoor, 2007, p. 101).

In most cases, individual board members or the whole board is blamed whenever there is a governance failure in a project. Therefore, there are numerous controversies regarding the role of inside and outside directors of an organization (Miller and Hobbs, 2005, p. 31). These challenges include the war for power as some outside directors criticize the control given to inside directors. In other situations, there are claims that some of the outside directors are so chosen based on their friendship or relationship with the top management of an organization (Moe, 2005, p. 21).

The construction industry criticizes this concept of selection considering that engineering projects are complex and require no mistakes as they may affect the general public negatively in

a catastrophic capacity (Muller and Turner, 2005, p. 398). Therefore, project management is a crucial aspect of the construction industry as it must address issues concerned with corporate governance in construction projects. Performance and quality, time and cost objectives are crucial aspects of project management and corporate governance ensures the success or failure of projects to meet these primary objectives of a construction project (Mustapha and Ahmad, 2011, p. 419). Corporate governance addresses these objectives by identifying, monitoring and reporting the state of these objectives throughout the Lifecycle of the project.

Researchers have identified a number of causes of project failure based on corporate governance. One of the causes of failure is the lack of a clear engagement path between managers and stakeholders, lack of a clear distinction of the senior management, lack of links between the key strategic priorities of an organization and the project (Okpara, 2011, p. 184). The lack of an effective corporate governance strategy between risk management and project management is a major cause of project failure in the construction industry. Many projects have not reached their full potential due to financial constraints in developing and managing projects. However, the failure of some projects in the construction industry to reach their optimal capacity is partly blamed on corporate governance, which focuses on evaluating proposals based on the initial price instead of focusing on the long-term values of money in project management (O'Sullivan, 2003, p. 23). These are a few of the problems in corporate governance of projects in the construction industry. Further investigations into the challenges of corporate governance systems for construction projects need to be conducted based on extant knowledge and new research, hence the need for this research.

Background of the Study

Project management as a discipline has developed massively since the 1950s. Traditionally, project management only focused on developing some technical specifications containing the budget of the project. This initial phase of project management system evolved and began considering the formulation of the plan for the activities, as well as their strategic sequence. Corporate governance, which is concerned with the construction of a set of relationships between the various practitioners in an organization, gave birth to the concept of project governance (Bekker, 2008, p. 32). Corporate governance is considered a vital component of project management in the construction industry since it deals with aspects such as the compilation of the structure that guides the achievement of the objectives of the project, the methods, tools and design of achieving these organizational and project management, as well as the monitoring process of the performance of the company according to the set of objectives (Aliza et al., 2011, p. 14).

Therefore, early researchers such as Contandriopolus et al. (2004), claimed that corporate governance is essential as it can aid in striking a balance between social and economic goals of an organization. In addition, corporate governance was considered vital in striking a balance between individual project goals and community goals within the environmental setting of a project. The framework of corporate governance in construction project management is essential in ensuring that there is efficient utilization of resources allocated for a project, and accountability in resource utilization. According to early studies by Davis (2007) on corporate governance, some researchers claim to the conclusion that while there may not be any single model that can be considered as the best in corporate governance, there is a set of principles, which personify good corporate governance systems.

In the United Arab Emirates (UAE), development has encountered a rapid transformation, which has changed the face of the UAE in a significant manner. Most of the investments that are carried on in the UAE are geared towards the construction industry (Essig and Batran, 2005, p. 225). The UAE was traditionally known as a place with extended deserts, fierce winds, and harsh weather conditions. Normally, not much could be done in the UAE as most structures were small and the place was largely undeveloped (Heide, 2003, p. 35). However, engineering innovations have transformed the UAE, especially in Dubai and Abu Dhabi. Most of the tycoons in the UAE have mostly invested in engineering construction, in the UAE. In addition, they have encouraged investment from all over the world, and this has seen many people from most parts of the world investing in engineering projects, in the UAE (Ive and Chang, 2007, p. 679). Currently, Dubai boasts of some of the most striking buildings in the world, including the tallest hotel in the world. The constructions in Dubai are so creative that they have found a way of building in the sea. Therefore, the UAE, which was once considered a place with harsh weather is now equipped with every necessity and residents and visitors, can now have access to every single social amenity. The contribution of the construction industry in transforming the face of the UAE has just taken place in only a matter of years (Knapp et al., 2011, p. 298).

Despite the several steps that the UAE has taken in transforming its face through engineering, there are still numerous challenges, which face the building and construction industry in most parts of the UAE (Jacoby, 2005, p. 70). In a similar manner to many areas in the world, there are numerous researchers who have stepped forward to identify these challenges, as well as the multidisciplinary solutions to these challenges. Engineering, being a crucial factor in development always encompasses research and development, especially considering that the

construction industry is a huge part of peoples' lives and can have adverse effects on people (Loeffler, 2003, p. 20). Therefore, engineers welcome every help they can get in combatting faulty moves that may affect the construction industry both directly or indirectly. This is crucial as construction must also pay close attention to the duty of care to every stakeholder involved around a corporation.

As much as engineers and other practitioners try their best to ensure a flawless process of managing construction projects, researchers throughout history have indicated that it is inevitable for the construction industry to face numerous challenges in corporate governance considering the huge size of most construction projects, which is a characteristic of most projects in the UAE. Researchers have also indicated that as much as progress in the construction industry is a highly desired concept, the best way of approaching progress is by addressing the challenges involved and involved in corporate governance, in the construction industry, and making all project owners and contractors aware of the challenges involved in the construction and management process of these projects (Miller and Hobbs, 2005, p. 35). Researchers claim that other than strategizing and managing projects based on confidence on previously known challenges, it is only possible to implement the right solutions to problems through the recognition of the challenges that affect the construction industry. Therefore, the right solutions to problems in corporate governance of construction projects in the UAE require an intensive analysis of the current challenges that face the industry not only on a local scale but also a global scale (Muller and Turner, 2005, p. 400).

Project management in the construction industry entails the projection of time estimates from the beginning to the completion of a project (Okpara, 2011, p. 186). While it is crucial to complete a construction project within the time limit specie due to financial reasons, as well as

other factors of consideration, usually, it is impossible to complete a project within the exact time schedule due to the constantly fluctuating conditions during the construction process. Most of the challenges involved in corporate governance arise from the project owners, as well as the contractors of the project (Mustapha and Ahmad, 2011, p. 421). However, researchers claim that most of these challenges can be avoided through careful planning and consideration of these challenges through the correct analysis of the cause of these challenges (Moe, 2005, p. 24). Challenge identification protocol in corporate governance begins with the contractors who usually bring out complaints whenever something does not go according to plan during the construction process of a project.

Researchers indicate that it is imperative for contractors to possess the skills that are necessary to help in the quantification of claims through the use of suitable documentation of the challenge, and an explanation that is clear enough to explain the challenge (Maijoor, 2007, p. 108). The quantification of the challenges should be based on the full package of the contract. Challenge management involves addressing the disagreement between the contractor and the owner in a bid to arrive at a solution that considers the concerns of both parties. Considering the massive size of most construction projects, some of the solutions to challenges in the construction industry are usually quite expensive (Loeffler, 2003, p. 22). Therefore, researchers came up with the ideas that one of the best methods of addressing challenges in the construction industry is through reduction of the challenge index, which aid in increasing the chances of successful completion of construction projects.

Many researchers and scholars have extensively investigated the challenges involved in the construction industry, most of their analyses have concentrated on the analysis of challenges, investigation of causal agents and invention of solutions. However, the challenges of corporate

governance in construction project management are a subject that has been largely ignored, especially in the UAE. This research will try to cover this gap in the literature.

Problem Statement

The governing bodies in the UAE have encountered a positive contribution from the successful construction projects in the regions. However, workers, project owners and contractors have experienced a lot of negative demotivation due to the numerous challenges that affect the construction industry (Knapp et al., 2011, p. 302). These challenges are numerous, and researchers claim that moving forward in the construction industry requires the identification and solution of challenges as the corporate level of governance in the construction industry.

Scope of the Study

This study will concentrate on the construction industry. The geographical location of the research will be limited to the UAE even though the contribution from the global construction industry may suffice to help put the research on a global scale. The scope of the challenges and the management of these challenges will be included in the process of conducting this research. However, the solutions to most of the challenges will be addressed precisely in the construction industry in the UAE.

Research Questions

The primary research question, which is considered in this study, is developed from the research topic. Therefore, the primary research question for this research is:

What are the challenges in corporate governance systems for construction project management in the UAE?

There are other supporting research questions, which include the following:

- What are the components of corporate governance in construction project management?
- What are the challenges in the process of implementing the corporate governance for construction project management?
- What is the impact of these challenges?

Objectives of the Study

This research has a primary aim of conducting a comprehensive analysis of the scope of challenges experienced within the framework of corporate governance in the building and construction industry, with emphasis on the UAE. The efficiency and cost considerations in the implementation of solutions will highly depend on the nature of the identified challenges in the construction industry. Therefore, the objectives of this study, which aid in ensuring that the research question is answered extensively are as indicated below:

- To identify and highlight the extent of challenges and their impact in the corporate governance systems, in construction project management, in the UAE.
- To identify the major contributors who influence corporate governance, as well as challenges in corporate governance, in the construction industry in the UAE.
- To comprehend all the challenges in the construction industry based on corporate governance and recommend the best solutions for these challenges.

Literature Review

Overview

Corporate governance is understood as the complex set of relationship, which involves the different players in a corporation, including the management of the company, the board of directors, the shareholders and the stakeholders (Flyvbjerg et al., 2003, p. 24). Corporate management plays a critical role in risk management, as well as other corporate governance principles. Therefore, rather than eliminating risks completely, corporate governance is involved in the internal control of risks within manageable levels. This is based on the fact that it is almost impossible to eliminate all possible risks based on the evolution of the corporate environment. Therefore, the requirements for corporate governance increase with the project complexity (Dunovic, 2010, p. 148). Since most construction projects are complex, as compared to other processes in other industries, the corporate governance of the construction industry is quite complex and requires extensive attention to detail. Corporate governance is crucial in the management of projects as it provides a framework for making decisions that are logical enough to govern a project. Therefore, the corporate governance provides a structured approach for conducting activities within a project (Crawford and Cooke-Davies, 2005, p. 47).

Project management is an extremely vital part of the construction industry as it determines the success or failure of most engineering projects. Processes, structures, roles, responsibilities and accountabilities support the corporate governance framework of a company (Aliza et al., 2011, p. 19). The impact of project governance, which is a factor that originates from corporate governance, is a crucial aspect of project management. Therefore, it is crucial for every challenge in corporate governance to be identified and addressed quickly in order to ensure

income generation aimed at meeting the financial goals of a project (Bekker, 2008, p. 32). Every manager of any project should be able to understand the relationship and the effect of factors that constitute a project.

Corporate Governance

Corporate governance is a concept that has led to a narrower topic in project management called project governance. Project governance extends the use of corporate governance into individual capital projects through employing aspects such as management of projects and governance structures to the business level (Contandriopolus et al., 2004, p. 632). Effective project governance entails having the correct project and defends it the right way in the first attempt. According to Davis (2007), this outlook of projects is crucial as it prevents time wastage through repetitions. Therefore, a project, which is done right the first time, not only saves time but also resources and minimizes the cost of the project. An effective system of benefits management is usually required when corporate governance is concerned with doing the project right. This entails aligning the goals of the project with the business objectives. Therefore, to ensure effective delivery of project benefits, it is vital for corporate governance to adhere to effective project management (Bekker, 2008, p. 31).

Therefore, corporate governance projects the aspect of project governance, which is mainly related to the activities of a project. Effective corporate governance of project governance ensures the alignment of the organization's objectives with the project portfolio (O'Sullivan, 2003, p. 50). Corporate governance of project management is an effective means of supporting the processing and delivery of timely information for the board, as well as other stakeholders. According to Aliza et al. (2011), a general assumption is that project governance, which stems

out of corporate governance for individual projects, refers to project management activities, which are usually under the control of the sponsor of the project or the board.

According to Okpara (2011), there are eleven major principles, which must be present for an effective corporate governance of project governance. The board is usually tasked with the responsibility of ensuring effective governance of project management. There should be a clear definition of the responsibilities, roles, performance criteria and duty of project management within the frameworks of project governance (Contandriopolus et al., 2004, p. 627). Effective project governance should entail the application of disciplines arrangements and governance throughout the life cycle of the project. This should be supported by controls and appropriate methods. According to Mustapha and Ahmad, (2011), there should be coherence and a relationship of support between a project portfolio and the overall business objectives. Crawford and Cooke-Davies (2005) also agrees that the lack of conformity between a project portfolio and objectives of a business may bring out collisions and confusions, which may result in undesirable effects such as delays, and the use of too much money for a project that could cost less if implemented within a coherent business structure (Muller and Turner, 2005, p. 398). All projects should contain a systematic plan, which must be approved. According to Davis (2007), these plans should contain authorization points, which allow the management team to review and approve the business case. This process allows management to be actively involved in the process of decision-making, which affect the project directly. Moe (2005) stresses that these decisions, which are made at the points of authorization, should be recorded for future reference and communicated clearly to avoid any form of confusion.

Representation is also a major principle of effective project governance. According to Dunovic (2010), there should be a careful process of choosing members of various authorization

bodies. Researchers such as Miller and Hobbs (2005), also agree that the selection of members of the authorization bodies in project management should focus on selecting members who are competent and ensuring sufficient representation. Essig and Batran (2005) also indicate that other than representation, there should be sufficient resources, as well as authority to enable these managers to make decisions, which are appropriate for the project. The business case of the project should be supported by realistic and relevant information, which provides a consistent basis for making decisions that authorize the progress of the project (Maijoor, 2007, p. 101). In addition, Flyvbjerg et al. (2003) argues that the board has a responsibility to scrutinize systems of project management independently. The process of scrutiny should be the basis for implementing decisions made from the scrutiny. According to Loeffler (2003), the principle of corporate governance requires criteria that are well defined for reporting the status of projects and the containment of risks to manageable levels for the organization. Another principle involves clarity and openness in the disclosure of information regarding the project, as well as a culture geared towards continuous improvement (Heide, 2003, p. 32). In addition, the principle of project governance considers the contribution from various stakeholders, including the capital from shareholders and the labour from workers.

The building and construction industry in the UAE has turned its attention to the global market (Jacoby, 2005, p. 73). Therefore, most of the projects are procured by international contractors who are experienced to build the complicated and magnificent structures that characterize the face of places such as Dubai and Abu Dhabi. Since the importation of manual labour, as well as other technical labour works, is a rather expensive activity, international contractors usually employ the services of local subcontractors and offshore labours to minimize the cost of project completion (Heide, 2003, p. 32). This means that the corporate governance in

the construction industry in the UAE is subjected to most of the abuses that other internal industries undergo.

The current structure of corporate governance in the construction industry is framed in such a manner that it is not only the board of directors who influence the process of decision-making regarding key elements of the activities of the industry, which include authorization of the commencement of activities (Levitt and Henisz, 2009, p. 61). Therefore, key executives in the construction industry can contribute in influencing the decisions made by the board of directors. As much as the executives of construction corporations usually receive directives from the board of directors, most of the directors, who include shareholders entrust some of the key decision-making processes to the executives and managers of the company (Hope, 2005, p. 283). Some of the board members are under the belief that the executives of the company are well-placed to make technical decisions regarding some of the critical investment decisions of the company due to their experience in the daily management and decision-making (Knapp et al., 2011, p. 295).

Many circumstances exist in which a power struggle between company executives, shareholders and board of directors regarding the corporate responsibilities cripples the operation of a company. There are shareholders who would like to have more decision-making capabilities than the management regarding how their money is invested in the company (Ive and Chang, 2007, p. 685). This notion is driven by the need to protect their investment and enjoy significant returns on their investment. Therefore, some shareholders in the construction industry are of the opinion that board members have more power that is necessary and this predispose them to abuse regarding their investment. According to Levitt and Henisz (2009), shareholders have the right to react in this way in matters concerning corporate governance since most directors and

managers use their position to limit the rewards for the investment of shareholders. This is done by limiting the dividends paid to the shareholders while reinvesting most of the company profits to other construction projects. Therefore, the interest of not director and managers is to keep control over more funds, so as to gain more control of the company (Bekker, 2008, p. 33). Most managers revoke the decision to pay dividends because this would mean control over limited funds, which reduces their control over the corporation. On the other hand, stakeholders want to experience a decision-making approach that is oriented toward giving them more rewards for their investment (Hope, 2005, p. 293). This indicates a discontent nature of the shareholders for being treated merely as a source of capital for investment and this provides a great challenge in corporate governance within the construction industry (Aliza et al., 2011, p. 91).

Recent problems experienced in corporate governance have necessitated the need for a change in corporate governance to include a code of ethics, which is to be observed by all senior corporate officers. Another changer of necessity in corporate governance is a change in the organizational culture (Flyvbjerg et al., 2003, p. 38). Other than the board of directors, corporate executives and corporate employees, the common structure of corporate governance also includes external auditors, accounting who includes accounting standards and enforcement agencies.

A major factor affecting the corporate governance in the construction project management is the acute need for clear communication with the community (Turner, 2003, p. 96). Structures and other constructions are amenities that have a direct contact and impact with the overlying community. Therefore, the management of the external environment, through the clear judgement of the perception of the community is paramount in construction project management. Therefore, it is imperative for a construction company to have a clear vision, which

must also be communicated properly and comprehended by the community (Roehrich and Lewis, 2010, p. 1159). This entails observing the vision, goals and objectives of the organization, and this requires an assessment of the extent of deviation of the activities of an organization from its aspirations. This situation is quite complicated in the UAE since it the construction industry in this region acts in a global capacity (Pryke, 2004, p. 73). This means that there are inter-stakeholders who may not understand the principles and the values of the region, and this may lead to the imposition of objectives and goals that jeopardize or contradict the national and regional values of states in the UAE. For example, the construction of some structures may go against the popular Islamic culture that dominated the UAE. There are certain symbols, which may not be welcomed in the region and may be judged as offensive (Regnery and Schwartz, 2007, p. 87).

Corporate governance in the construction industry must deal with the problem faced by other industries of the challenge in separation of control and ownership (Scott, 2006, p. 286). In the UAE, the construction industry is a fast growing industry, and this growth causes some concerns from various players within the construction industry. The main concern is that shareholders tend to be dispersed as the corporations grow (Walker and Wing, 2008, p. 170). The cause of this is claimed to be the growth of the corporation leads to massive profits and management of huge finances gives the management team more power in the corporation, which leads to the alienation of shareholders. In the UAE, corporate governance is not only concerned with the control of the corporation, but also with the accountability of those in control of the corporation (Rebeiz, 2004, p. 189). The accountability concept of the corporation ensures that corporate governance in the construction industry not only observes the legislation of the company but also considers the law in the UAE region. This includes both legal restraints, as

well as other norms in business practice, which include the concept of best practice, which is implemented through self-regulation (Winch, 2009, p. 339).

A core principle of corporate governance in the construction industry in the UAE and in most parts of the world is the responsibility of project governance to translate the requirements and expectations of the shareholders, non-profit-stakeholders and owners of an organization into a performance by the company (Rhode, 2007, p. 5). In addition, corporate governance is charged with the responsibility of ensuring that there is sufficient trusteeship for all resources, and especially the capital provides for the operation of the organization (Patel, 2007, p. 28).

The Board of Directors plays an important role in the system of corporate governance of an organisation (Valk and Iwaarden, 2011, p. 203). Traditionally, all works involving governance were viewed as exclusively being the responsibility of the board of directors (Rebeiz and Saleme, 2006, p. 25). Therefore, the governance task of the company, including the system of controlling and directing the policies, affairs, actions and functions of an organization, as well as the accomplishments of the organization are the responsibility of the board of directors (Turner, 2006, p. 94). The board of directors has a corporate responsibility, which is seen to comprise of giving leadership and overseeing the actions of the organisation. Therefore, the ideal process of governance was mainly concerned with the installation of processes, which are directed towards the protection of the interests of shareholders (Vafai, 2005, p. 20).

In the UAE, there are practices that have been recommended by regulators from around the world regarding good corporate governance. Such principles include the requirement of construction companies to provide a statement of compliance annually (Pryke and Pearson, 2006, p. 341). The traditional sense of corporate governance tended to focus mainly on legal

compliance and financial performance. Practical governance in the modern world tends to focus on three levels, which include the board, the corporate and the project level (Winch, 2000, p. 75). Therefore, rather than focusing on the board approach as seen in the traditional approach to governance, the practical governance functioning in most modern organisations is quite widespread. It includes several functions, which apply to most construction companies in the UAE (Vrijhoef et al., 2003, p. 32).

One of these factions of corporate governance is the establishment of board policies, which are active in the definition and reflection of the principles of the board, the values, as well as the rules of the board. Effective project management of construction projects also relies on corporate governance to appoint reliable chief executives and ensuring capability and competence thorough overseeing the organizational management (Stretton, 2010, p. 58). Corporate governance in the construction project management is also tasked with setting up the vision, the mission, and setting up strategic goals, the direction and the overall organizational strategy (Wilson and Connell, 2009, p. 25). In addition, corporate governance monitors the performance and links achievement to performance. Strategic position is a crucial aspect of corporate governance such that each construction project management is aligned with the long-term view of the company.

In a bid to avoid power struggles in the construction industry, the corporate governance in most construction projects in the UAE is tasked with the responsibility to ensure a clear definition of the power division and responsibilities between the board, the management and other stakeholders in a company (Wilson, 2006, p. 16). In addition, corporate governance is also concerned with the approval of short-term strategic operations provides by the Chief Executive Officer of the corporation (Winch, 2001, p. 803). Other approvals that require the attention of

corporate governance include performance objectives, annual plan and operational strategies, which are aimed at achieving the strategic goals of the board. In project management, corporate governance comes is crucial in ensuring that the annual plans of the organization also include a provision of the human and financial resources, which are essential for the completion of construction projects (Yip et al., 2007, p. 218). Corporate governance must also maintain good relationships, communication and the overall image of the organization. As much as most organisations ignore corporate governance, which usually focus on the position of the chief executive in their charts, the practical structure of an organization includes governance throughout the organization. However, there is little consistency in the deployment of corporate governance in project management in organizations (Winch, 2001, p. 800).

Uniqueness of Construction Projects predisposing them to Challenges

The management of construction projects is considered as being unique from the management of projects form e characteristic and requirements of the construction industry. According to Turner (2003), most managers, directors and other governance of construction projects, which have either a direct or a peripheral effect on the management of construction projects. As much as most of the challenges affecting the governance of construction projects are peripheral, there are many construction issues, which also affect corporate governance and project management in the construction industry (Wilson, 2006, p. 29). However, corporate governance needs to address all the challenges to ensure that the goals of a construction project are achieved.

Some of the most notorious issues in construction that require effective implementation of project governance include safety, consideration of the workforce, the changing nature of

construction work and time constraints (Roehrich and Lewis, 2010, p. 1162). Some of the non-construction challenges faced by project managers in the construction industry include government regulations, legal issues, and the socio-political pressure and environmental concerns (Wilson and Connell, 2009, p. 29). Therefore, all individuals involved in corporate management must have a good comprehension of the demands that encompass the control and planning of construction operations (Pryke, 2004, p. 75). As opposed to other industries in which corporate management still adheres to the old model of corporate governance, which only demands them to engage in financial and resource management, the construction industry demands more from anyone involved in corporate governance, in project management.

A unique set of activities is involved in projects within the construction industry. These activities are quite important and must follow a unique set of procedures for successful implementation. Therefore, criteria, which include safety, quality, time and resource allocations, form the basis for the judgment of the success of a project in the construction industry (Stretton, 2010, p. 59). This means that the successful operation of an activity based on one criteria of judgement may not guarantee the success of a project. On the other hand, a wholesome operation of a project to meet the different criteria for judgement defines a successful project. Therefore, project management in the construction industry is highly needed to achieve the objectives and the goals of a project (Regnery and Schwartz, 2007, p. 88). This is done through planning the resource expenditure to meet the quality requirements, scope, safety, and time requirements for the project. Therefore, one of the responsibilities of corporate governance of a construction project to deflect, mitigate or control any of the factors surrounding project management that affects the successful implementation of a project (Vrijhoef et al., 2003, p. 34). The unique

construction issues that affect corporate governance in construction project management is discussed further below.

Nature of the Work

According to Regnery and Schwartz (2007), the nature of construction work is described as chaotic. Therefore, some of the challenges experienced in the construction work, which are not present in other industries are attributed to the very nature of the work in the construction industry. For example, this difference is visible when the construction industry is compared to the manufacturing industry (Winch, 2000, p. 75). Most of the works within the construction industry are seasonal, as opposed to the works in the manufacturing industry, which is continuous (Scott, 2006, p. 287). Project management in the construction industry is also challenging in that corporate governance must be flexible considering that each project in the industry is unique. Therefore, a single corporate governance strategy in project management cannot be applied for all construction projects. Therefore, each project must be accorded its own unique set of rules and principles for governance. For example, a construction project in the UAE, which involves the construction of a mosque cannot be managed like projects involving the construction of a five-star hotel or tourism destination (Pryke and Pearson, 2006, p. 345).

While the manufacturing industry can engage in the manufacturing process by manufacturing products in a centralised location with ample transport avenues and available amenities, the construction industry often involves the construction of projects in remote sites, which usually have several access problems (Walker and Wing, 2008, p. 171). Rebeiz (2004) indicates that this problem is a major concern in the UAE as the region is characterized by harsh weather conditions, as well as the harsh environment. Some regions of the UAE are mostly

composed of sandy deserts, without accessible roads. Therefore, the achievement of most goals in the construction industry must focus on combating the harsh environmental conditions (Vafai, 2005, p. 25).

The desert palace must receive special attention in order to enjoy the same success as in normal terrains. In addition, the project management in the UAE involves bold projects, which encroach into the sea (Rebeiz, 2004, p. 191). Therefore, these projects involve land reclamation and are tedious, and they require highly skilled labour and management of these projects. This requires the use of highly tested scientific information such as the understanding of forces, which must be overcome in the reaction of supporting beam under the ocean (Turner, 2006, p. 99).

In addition, there are construction projects in the UAE, which face the problem of inaccessible location. An example of these projects is the construction of dams, which require the location of a project next to a water channel. According to Winch (2009), there are many construction projects in Dubai, which involved land reclamation. The process is complex and requires specialised expertise to prevent present, as well as future catastrophic events such as the collapse of buildings, which could end up in the loss of hundreds of lives (Patel, 2007, p. 30). In addition, these projects involve intricate operations, which may increase the budget and stretch the expected completion deadlines to extreme ends, if not properly managed (Rebeiz and Saleme, 2006, p. 28).

Further studies on the uniqueness of construction projects by researchers such as Bekker (2008) illustrate that construction projects are not always predictable. Most manufacturing projects follow a continuous process of production of a job shop form of production, in which material moves through predetermined paths from the beginning to the end of production (Davis,

2007, p. 383). These remove the complications and uncertainties in the manufacturing industry. However, the construction industry involves complex processes, which may not go through a specified sequence of activities. In addition, there are some operations in the construction industry, which need to be conducted in favourable weather conditions (Contandriopolus et al., 2004, p. 630).

Projects in the desert areas or the ocean may experience delays due to strong winds. This includes activities such as the erection of beams using cranes, which may be toppled by strong winds (Essig and Batran, 2005, p. 225). In addition, there are projects, which are carried in proximity or within the oceans, which may be affected by strong tides. Therefore, the services of weather analysts may be required to anticipate harsh waves, which may affect the success of construction projects. These include the installation of underwater turbine and pumps to generate of electricity or pump water (Heide, 2003, p. 33).

Contrary to the projects in other industries, construction projects may have trouble in automation. Since most industries share projects, which go through definite paths of activities, they are easily automated (Ive and Chang, 2007, p. 678). Most of these processes are not complex in their physical nature and hence they do not require special project management. On the other hand, the nature of construction projects makes it difficult for them to apply automation of all activities since there are several activities such as the mounting of beams on cranes, which require a human touch for effectiveness (Knapp et al., 2011, p. 296). There are other activities such as the joining of pipes to carry the coolant liquid, such as ammonia, which require specialized attention during the welding part, as well as counterchecking for any cracks with the use of x-ray to prevent the leakage of such a coolant, which is extremely toxic and may endanger the lives of people and animals.

Unforeseen conditions in the construction industry are at a high probability of occurrence. Some of these unforeseen circumstances have been mentioned and include strong waves and tides, extremely strong winds, high and unbearable temperature and the breakage of some machinery, among others (Jacoby, 2005, p. 72). Project management requires extreme care in the valuation of the financial requirements of the project. The high probability of uncertainties in construction projects predisposes them to cost variations, which will depend on the extent of variation of conditions (Maijoor, 2007, p. 101). Therefore, extreme cost variations may render a project non-economical and; hence lead to delay or failure of a whole construction project. Instances such as machine breakage, the emergence of further part requirements, which must be imported from Western nations to the UAE and the realization of extreme undervaluation of cost-requirements, require highly skilled, and practical corporate governance; if at all, the managers and other stakeholders are going to overcome such barriers (Moe, 2005, p. 21).

The management and supply of utilities for construction projects predisposes the corporate governance to another challenge of high magnitude. According to (), the construction industry in the UAE is highly internationalized, such that most of the contractors come from overseas. Therefore, these contractors may need to import some of the utilities including special cranes and other large machinery to be used for the project. However, the importation of these utilities may bear great risk and consequences, which can be avoided if they are locally available. However, locally available utilities may lack the standards or may have some other disabilities, which create the demand for imports, and this is a major challenge for corporate governance in the construction industry (Mustapha and Ahmad, 2011, p. 421). Most of the utilities in other industries such as the raw materials for the manufacturing industry are locally available, and others are easy to transport, which makes the construction industry unique.

According to O'Sullivan (2003), the construction industry is messy and may result to the demolition of utilities such as transportation and communication utilities, among others. The impact of destroying these utilities may be enormous to construction projects. These projects may be affected directly if the damaged utilities prevent effective communication of transportation of resources (Okpara, 2011, p. 185). In addition, the damage of power supply utilities may lead to the lack of the power necessary for the completion of the project. They may also affect the project indirectly in that other person or legal entities and take the management team of the project through lengthy legal procedures for infringement on private or public property and utilities. Therefore, corporate governance in these projects must be careful to avoid such constraints (Muller and Turner, 2005, p. 399).

The adoption of technical innovations in the construction industry is rather slow as compared to other industries. The adoption of this innovation in industries such as the car assembly industry is quite fast and this has enabled the automation of most industries (Miller and Hobbs, 2005, p. 34). The construction industry is an industry that requires the adoption of full-proof innovations. This requires a rigorous and tedious process of model construction and testing before they are finally adopted in a prototype (Loeffler, 2003, p. 21). This process may take several months or even years to perfect before they are authorized for construction companies. Therefore, the corporate governance of construction projects must engage in a careful process of obtaining standardization and quality standards in a bid to prevent revocation of contracts or license of operation. In addition, the successful implantation and completion of construction projects highly depends on the quality of every worker and consultant involved in the work process (Levitt and Henisz, 2009, p. 63).

Construction projects that are implemented in most parts of the UAE involve multimillions or billions of cash. The fact that automation may be difficult in construction projects, it is imperative for the corporate governance involved in the construction industry to ensure high quality of construction products by employing highly qualified services. In addition, the nature of work in the construction industry is so customer-oriented that it becomes difficult to employ changes in technology and production process (Klakegg et al., 2008, p. 29). The nature of work, which is done within the construction industry is also set in a manner that most of it is carried out under conditions that are not controlled. Therefore, the impact environmental factors may be immense on construction projects. Therefore, this section demonstrates that the impact of the very nature of construction work makes it as a unique industry, which presents different challenges to other industries (Hope, 2005, p. 283).

Work Force Considerations

The greatest asset in the construction industry is the human resource, which comprises of labourers, corporate governors and other stakeholders including shareholders. This is considered a common phenomenon in the construction industry, as well as other industries in the corporate world (Dunovic, 2010, p. 147). Therefore, the knowledge, as well as the skills of the people is involved in the process of planning, and execution of the activities in the construction operations is extremely crucial. Therefore, one company is distinguished from another based on the quality of the human resource of a company (Crawford and Cooke-Davies, 2005, p. 49). Therefore, it is imperative that the corporate governance of the construction industry adheres to the selection of the most talented, management team, which can guide and direct the crucial operations of the company (Aliza et al., 2011, p. 16). Other than the direct impact of corporate governance in the success of a company, good corporate governance is also engaged in the selection of an adequate

number of both skilled, as well as unskilled labour forces to perform other works within a construction project. Since the construction industry depends highly on the quality of the services provided by skilled and unskilled workers, one of the greatest challenges of corporate governance in the construction industry is the recruitment of skilled and talented people to complete a project (Turner, 2003, p. 97).

Several factors contribute to the problem of recruiting the best workforce in construction, in the industry. The lack of attractiveness of the construction profession is a factor that challenges corporate governance. According to Roehrich and Lewis (2010), the construction industry is considered by many people in the UAE as one of the least lucrative jobs in the job market. Therefore, many people shy away from indulging in honing their skills in the construction profession. In addition, only a few youths consider enrolling in courses related to construction (Pryke, 2004, p. 75). Therefore, the final number of qualified construction workers is extremely low, which provides a very limited number of people from which to select the workforce.

According to Regnery and Schwartz (2007), the construction industry is characterized by dangerous, hard and dirty works as compared to other industries, which are usually ready to provide a clean and conducive working environment, which is also driven by the nature of the work. For example, a milk processing industry must adhere to high standards of cleanliness and temperature control. Therefore, most of the manufacturing industries have a conducive working environment, which attracts many young people to pursue these professions (Scott, 2006, p. 287). In addition, there is a high rate of adoption of technology in other industries, which attracts the youth to these new industries. The youth are repulsed by industries such as the construction

industry, which are custom-oriented; thus creating a shortage of the workforce in the construction industry (Walker and Wing, 2008, p. 170).

The construction industry in the UAE relies heavily on immigrants and foreign labour. Immigrants, including those from the developed nations and developing nations in Africa, fill the labour void in the UAE. As much as the contribution of all these immigrants and foreigners is crucial for sustaining the construction industry in the UAE, corporate governance is concerned about the problems brought about by this form of the labour force employment (Winch, 2009, p. 340). The main problems are problems concerning language barriers. The first language of the majority in the UAE is Arabic. Therefore, most managers and other executives and personalities involved in project management are tasked with the responsibility of having to learn multiple languages to enhance effective communication.

According to Patel (2007), effective communication is a crucial factor in achieving successful completion of construction projects. Rhode (2007) also argues that the lack of effective communication, which may be caused by language barriers or factors including high noise levels may be the cause of a project failure. Since the mounting of some parts requires precision and accuracy, the lack of effective communication from the project coordinators may cause the misuse of resources, which render the project costly (Patel, 2007, p. 28). In addition, communication barriers may also lead to dangerous safety and health risks. The solution of the communication barrier may be solved through a two-way method, whereby the immigrants and the foreigners can also be encouraged to learn Arabic to enhance easy and effective communication between the management and the work crew. For this to be a choice, construction projects need to engage in an intensive assimilation program for the management and the working crew before the commencement of the project. This action requires not only the

use of valuable time but also project management, which budgets for it, and this increases the cost of a construction project in the UAE (Valk and Iwaarden, 2011, p. 203).

In addition, overcoming the language barrier empowers the labour crew to take up leadership positions and advance professionally. The empowerment of the labour force is advantageous for construction projects since it enhances commitment, self-motivation, innovation, enthusiasm and productivity (Rebeiz and Saleme, 2006, p. 26). In addition, the employees also benefit from this action by feeling a sense of belonging, appreciation, as well as a high sense of self-worth, which enhance the life quality of the workforce in the construction industry, which ultimately results to an improved quality of work and construction products. According to Turner (2006), there is a positive correlation between the level of empowerment and productivity. Vafai (2005) also agrees with this notion and indicates that empowerment usually increases the level of productivity of workers in any industry.

Safety

Safety is a major factor affecting corporate governance. As much as safety is a component of every industry, there are some industries, which have more safety risks than other industries. The organizational success depends highly on the ability of an organization to maintain high safety standards for its workers (Pryke and Pearson, 2006, p. 342). According to Winch (2000), this has necessitated the creation of a health and safety department in most companies to address safety issues according to international safety standards. The construction industry is ranked as one of the industries with the highest safety risks. The safety risks in the construction industry, which are quantified according to human suffering and costs, are quite high in the UAE, as well as any other parts of the world (Vrijhoef et al., 2003, p. 34). The high

degree of risk and hazard in the construction industry makes creates many accidents in the industry and the cost of avoiding these accidents is quite high. Therefore, other than the financial losses caused by these accidents, the worst effects include the bodily injury, death and the social and human impact that results of these accidents (Wilson and Connell, 2009, p. 25).

The corporate responsibility of managers and other powerful people in the construction industry is to mitigate the risks and hazards in the construction industry. The compensation of workers and other insurances may help to protect the contractors and the management of direct expenses caused by these accidents (Stretton, 2010, p. 58). However, accounts usually involve some other forms of costs, which cannot be compensated by insurance. These costs are referred to as indirect or hidden costs. Some of the direct costs, which incurred by the organization include medical and compensation costs. However, the indirect costs of accident and other safety issues are numerous (Wilson, 2006, p. 18). The time that is lost by workers who have incurred injuries is invaluable and is a major hidden cost as it cannot be compensated. Time lost from work leads to the loss of income or the earning power of a worker, which impacts negatively on the economic position of workers, and their families. Consequently, the quality of life and the standards of living of workers who have incurred injuries in construction projects diminish significantly (Yip et al., 2007, p. 219).

Injuries also cause the loss of efficiency in the construction site since it breaks up the crew. The consolidation of the construction crew over time is an important factor that increases the efficiency of work (Contandriopolus et al., 2004, p. 629). It also creates chemistry between workers, which is a hard to achieve with a new worker. In addition, an injury to one member of the construction crew may cause an emotional or psychological trauma to other workers, which may affect the efficiency and quality of their work (Davis, 2007, p. 385). Therefore, corporate

governance in the construction industry must accommodate the capacity to train new employees who can replace the injured employees. This takes time and may cause project delays. Other than human costs, accidents may cause the damage of costly equipment and tools, which may necessitate the purchase of new tools and equipment. This could affect the project negatively by increasing the cost of the project to an uneconomical level (Essig and Batran, 2005, p. 225). Some of the products may also be lost in the event of accidents, which contributes to the hidden cost. These factors may lead to delays, which also increase the cost of construction projects.

The breach of contract may be caused by accidents. Breach of contract may involve factors such as late delivery of products, which may have been caused by an accident. Therefore, corporate governance has a responsibility to ensure that accidents are minimized in the construction industry as a client may claim compensation for damages caused by breach of contract. Other costs include overhead costs, which may be caused by disruptions in the process of construction work. Safety also affects the work progress and the cost of operation in that whenever there is an occurrence of accidents; investigators are deployed to the site of the accident (Crawford and Cooke-Davies, 2005, p. 48). Corporate governance is challenged to anticipate such unexpected costs of production, which are related to accidents in the process of implementing project management, in the construction industry. In addition, safety matters in the construction industry as cost projects are awarded to a company due to its reputation. Therefore, accidents in a company may lead to negative publicity, which leads to the loss of future projects. Maintenance a good public image is a crucial aspect of corporate governance, especially concerning safety issues (Maijoor, 2007, p. 102).

There are several reasons, which require the vigilance of the corporate, governing body of a construction company, based on safety issues. According to Miller and Hobbs (2005),

corporate governance must consider the legal obligations and requirements, which are imposed by OSHA. In addition, contractual requirements must be considered before engaging in a construction project. Corporate governance must also consider and encourage project management to consider the profit picture of a project (Moe, 2005, p. 22). This included direct, as well as the indirect financial impacts of safety issues. The moral obligation and the ethical duty of the corporate governance towards ensuring safety in the dangerous construction industry must be considered.

Since the company has a duty of care towards employees and the society, the court usually charges the employer, with the responsibility of ensuring that there is a safe working place with a conducive working environment (Muller and Turner, 2005, p. 401). Therefore, even though the construction industry is accident prone, these accidents can be minimized through enforcement of safety rules and regulations, which affect the organizational use of tools and equipment, as well as safety appliances. Therefore, a successful safety program must be enforced through the support of the management, enforcement of the management and workers, comprehensive training and recognition of the need for safety of every employee (Okpara, 2011, p. 185).

Time Constraints

Corporate governance usually translates time to money, in that the number of hours invested in active production result to additional profit, while the time lost in the project lead directly to losses. According to O'Sullivan (2003), the perspective of the owner of a construction project is that receiving no returns for investment represents lost revenue. Therefore, it is the responsibility of corporate governance to ensure that shareholders investment in protected and

invested well to ensure profitability. Other factors, which represent lost revenue to owners of a construction project in terms of time constraint, include negative marketing impacts, loss of clients or tenants, and payment of extended interests (Contandriopolus et al., 2004, p. 629).

Time constraints also mean that whenever there is a delay in upgrading construction facilities, a company or a project usually operates at an efficient, which is below its optimum efficiency. Therefore, the low operating efficient results to a higher user cost (Davis, 2007, p. 383). There is a negative effect of delayed results in rehabilitation and constructing of engineering infrastructure, which affects not only the business but also the public. From the contractor's perspective, time limitations include incentive or disincentive payments and liquidated damages. In addition, delays may cause an increase in overhead-extended cost of a construction project. It also forces the contractor to forgo future projects, which may be affected by delays in the current project. Higher equipment and labour costs are also a result so inefficient time management, which affects corporate governance as far as construction project management is concerned (Dunovic, 2010, p. 145).

The modern business world is driven by time management, scheduling, planning and control. Therefore, corporate governance within the construction industry is challenged to produce high volumes of construction products and complex construction projects within a tight period. In addition, the resource allocation is usually minimized, which necessitate good time and resource management (Essig and Batran, 2005, p. 221). Therefore, there must be a comprehensive planning and monitoring of construction operations supported by effective project management. Corporate management in the construction industry in the UAE stresses the need for implementation of effective schedules in construction project management and linear schedules, which are tools that are valuable and effective in the planning construction projects.

Scheduling requires an intensive engagement of the management to consider most factors affecting the project before the commencement of the projects (Heide, 2003, p. 32). The scheduling provides a structured plan of activities for the project. Communication of the work plan to their crewmembers involved in a project requires comprehensive schedules. Therefore, staying within the schedule require a proactive approach rather than a reactive approach in construction project management so as to avoid negative impacts of time constraints within a project (Ive and Chang, 2007, p. 677).

Environmental Issues

Since the 1970s, there has been an escalating impact of environmental issues on the construction industry worldwide. In the UAE, this impact is highly felt due to the adverse weather conditions. The global nature of the construction industry in the UAE forces the project owners and constructors to have a clear definition of their liabilities and duties concerning the environment (Regnery and Schwartz, 2007, p. 87). Strict environmental regulations, which include permit requirements, and enforcement of construction designs, which protect the human health, as well as the natural environment are enforced. Some of the nations in the UAE enforce strict Sharia law even in corporate governance. Therefore, project termination or costly delays may be caused by the failure of a project to adhere to environmental regulations. Environmental irregularities may also lead to the disqualification of a corporation from bidding for future tender in the construction industry in the UAE. In addition, it may lead to negative publicity, which affects the marketability of a company. The modern corporate world stresses about sustainability of business operations, which also includes green production, which entails the use of materials and methods that are environmentally friendly (Winch, 2009, p. 339).

Other issues affecting the corporate governance in the construction industry within the UAE include legal issues, governmental regulations and social-political pressures.

Legal Issues

Legal issues include claims issues by contractors for time extension or additional compensation due to occurrences, which are out of the contractor's control. The UAE is developing methods that can effectively lead to amicable dispute resolutions without having to go through the court process (Valk and Iwaarden, 2011, p. 203). These are called alternative dispute resolution methods. They are widely used to solve disputes within the construction industry in the UAE and include methods such as negotiation, arbitration, the use of neutral advisors, mediation and a dispute review board. The alternative dispute resolution methods are preferred because they solve issues to the satisfaction of both parties. Extensive constructability and document review in pre-construction is required to avoid claims by any party in the construction process (Vrijhoef et al., 2003, p. 32).

Governmental Regulations

Governmental Regulations affect corporate governance in the construction industry through such processes as licensing requirements and construction codes. The licensing requirement in the UAE passes through rigorous international standards, which include the National Electrical Code, the International Building Code, and the Life Safety Code among other regulations (Yip et al., 2007, p. 218). Contractor licensing laws, cost evacuation and permitting requirements are factors that require the attention of the owners and constructors. The resolution of issues affecting the completion of a project usually goes through an extended period due to the involvement of government regulations, which introduce a bureaucratic process.

Socio-Political Pressures

Pressure from socio-political aspects of the construction industry is a major concern for project management in the construction industry. The UAE has several social and political issues, which affect the implementation of plans for execution of construction projects (Winch, 2009, p. 339). Community involvement is critical, as the approval of the community is crucial for a smooth flow of activities. In addition, corporate governance must extend the benefits of a construction project to the surrounding community (Pryke and Pearson, 2006, p. 343). This includes job creation during the construction in the process and the completion of construction facilities. Several groups, including community groups and civic groups may have an influence in the design of a construction project. This chapter illustrates that the challenges of corporate governance within the construction industry in the UAE are immense. However, most of these issues have solutions.

The Conceptual Framework

The subject matter is based on challenges of corporate governance systems for the construction project management. This issue will be analyzed based on two perspectives; the first perspective will analyze the role of managers in corporate governance systems. This will entail sources of challenges in corporate governance for construction project, assessment of problems resulting from poor construction management, and the impact of effective project management in various areas of corporate governance systems. In addition, it entails projects' managers' motivators to perform in the management of construction projects in corporate governance, workforce and project organization management, and best practices among managers as a control and elimination strategy for damages in corporate governance systems. The other view focuses

on the role of consultants in corporate governance systems for the construction project management. This will entails consultants' motivators to perform in the management of construction projects, and the significant knowledge areas for consultants in the effective management of the construction project (Winch, 2009, p. 339).

This research constitutes of the use of interviews and literature review as data collection methods. This study utilizes the agency theory that is based on significant association of management approaches, project's objectives and goals, reporting, disclosures, and the roles of stakeholders and project owners (Turner, 2006, p. 94). As such, such associations reflect the value of agency theory of corporate governance in the construction project management. As such, the agency theory is an effective tool for the resolution of problems regarding the relationships of stakeholders and managers on matters that relate to the project development and completion. As such, this theory is founded on the basis of ensuring effective management for the maximization of wealth of project owners. In addition, this study considers the legal provisions in the corporate governance systems that enable managers, stakeholders, and owners of the construction project to avoid conflict with regard to personal interests (Rhode, 2007, p. 5).

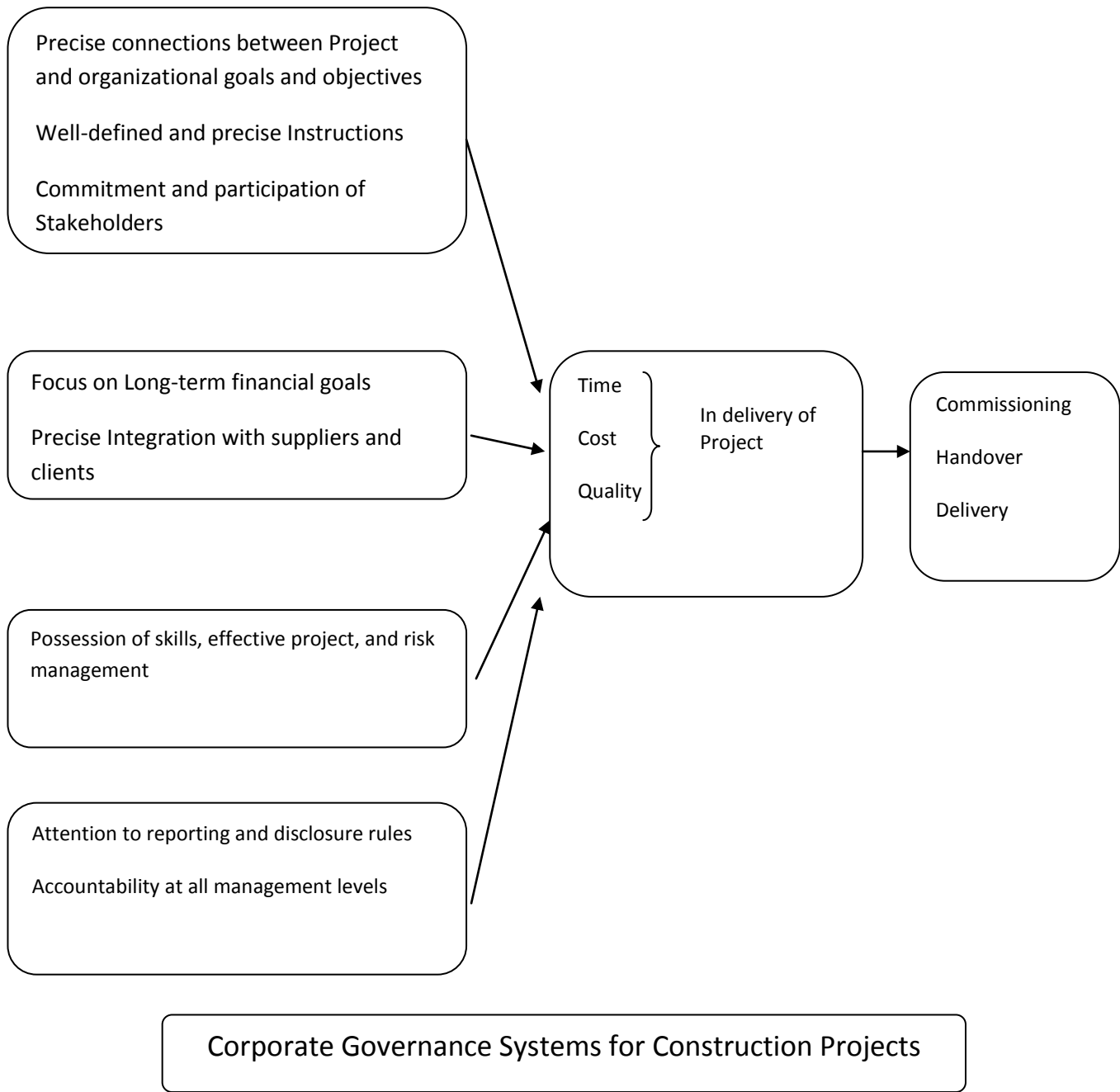


Figure 1: Illustration of the Conceptual Framework

Methodology

In order to meet all the objectives of the study the research will implement a research design that seeks to explore all aspects in the construction industry. This is effectual in determining challenges in corporate governance system for the construction project management. This is attributed to the notion that the construction industry in the UAE is faced by a range of challenges that affect the effectiveness of the entire construction organization (Crawford and Cooke-Davies, 2005, p. 45). In addition, this research is based on the notion that in order to establish an optimal working condition in the construction company, the challenges must be identified in order to realize practical and strategic solutions. As such, the challenges that are identified play a vital role in the decision-making process in order to realize optimal strategies for the management of the construction projects in the UAE (Flyvbjerg et al., 2003, p. 32). Therefore, all the objectives of this research will be met through holding on the concepts within the scope of the study and answering the relevant research questions.

Research Design

This study will utilize a research design that is based on mixed methods approach. The mixed methods approach entails the use of quantitative methods as well as qualitative methods in data collection and analysis techniques (Davis, 2007, p. 387). The mixed research technique is effective in enabling the research to explore all aspects of the study. This is carried out in a manner that supports the conclusive coverage of the subject matter. The qualitative approach is effective in collecting and analyzing opinion, and various qualities of the study (Essig and Batran, 2005, p. 226). While the quantitative approach is effective in the quantification of data, including obtaining definite results from a set of alternatives that are submitted to the

respondents as acceptable responses of a defined questionnaire (O'Sullivan, 2003, p. 27). In addition, this approach is sufficient in investigating a wide field of study such as corporate governance systems. It places the concepts that involve the challenges in the construction project management in this field under scrutiny in an unbiased and exploitive manner. As such, it that seeks to understand all aspects of challenges faced in executing managerial roles (Klakegg et al., 2008, p. 29). The methods used in qualitative and quantitative approaches provide a means of obtaining both primary and secondary data. As such, it enables the researcher to gain access to newly developed concepts regarding the issues at hand, hence, enabling the researcher to compare the existing models and the new models that are effectual in capturing relevant information regarding challenges in corporate governance systems for construction project management in the UAE (Okpara, 2011, p. 188).

Quantitative Approach

The quantitative approach will entail the review of literature method used in the collection of data. The review of literature will be implemented as a research method in this study to collect data from a variety of scholars based on quantification of data obtained from previous researches showing proportions, trends, extent of impact, and levels that managers experience challenges in managing projects with respect to challenges of corporate governance systems for construction project management (Knapp et al., 2011, p. 297). This is because the review of literature forms the basis of theory developments in a manner that is necessary in obtaining valid findings from the study and draw objective conclusions regarding the subject matter. In addition, the review of literature is based on theory-proven findings and scientific evidence in the collected data (Muller and Turner, 2005, p. 401). As such, it entails the use of critical and systematic steps in analysing and obtaining relevant information that ensures the

collection of data with up-to-date knowledge and applicability based on the latest development in research.

The review of literature was utilized in the identification of gaps in the literature knowledge, providing criteria for filling these gaps, identifying a point of agreement among all scholars with regard to the extant literature, as well as identifying contradicting points and criteria of reconciling such points. This is effectual in obtaining unbiased data that place into consideration all points of interests. As such, the review of literature techniques identifies both the limitation of the study, strength in the study, and provides a basis for formulating recommendations that should be utilized in order to overcome the identified information, as well as areas of future research (Levitt and Henisz, 2009, p. 58). Therefore, the review of literature clarifies ideas and motives of scholars regarding challenges in corporate governance with respect to the management of construction projects. Additionally, the review of literature plays a significant role in placing into consideration various aspect of the subject matter in the form of divergent findings obtained from empirical studies indicated by different scholars in the filed under study (Miller and Hobbs, 2005, p. 36).

Therefore, the review of literature will be based on thematic selection of relevant literature within the last ten years that is from the year 2004 to date. The researchers seek to obtain data from quantified information regarding corporate governance systems, challenges in project management, and specific challenges as experience in the construction projects in UAE. The data will cover the challenges as experienced by managers during their execution of managerial roles in construction projects. In addition, the data collected from the review of literature seeks to examine the manner in which these challenges affect optimal functioning of employees and the general performance of the project in question (Moe, 2005, p. 25).

Qualitative Approach

The qualitative approach entails the use of interview technique (Loeffler, 2003, p. 27). This technique is effectual in the collection of qualitative responses from respondents in a manner that collects data that captures respondents; attitudes, perspectives, opinions, and arguments. This technique collects first-hand information that is linked directly with the situation at hand, the scope of the study, and objectives of the research (Maijoor, 2007, p. 103). In addition, the use of interview technique enables the researcher to obtain detailed data that cover all aspects of the study through designing interview questions that cover the entire field of study. In addition, it captures the real-life situation within corporate governance systems and exposes all challenges encountered in managing construction projects in the UAE (Jacoby, 2005, p. 73).

This approach entails the implementation of ethical considerations into the study. As such, it necessitates voluntary participation of sample subjects. Moreover, it ensures that participation is based on informed consent where participants are briefed regarding the data utilization criteria, the purpose of the study and the associated benefits or risk of participation. Moreover, it necessitates the anonymity and confidentiality property regarding the collected data during the data collection, recording, presentation, and implementation processes of the study (Davis, 2007, p. 384). In addition, the integrity of data must be upheld through ensuring that the researcher records the data as provided by respondents without adding or omitting information. In addition, the integrity of data is ensured through eliminating all possibilities of researchers to manipulate respondent in any way in order to ensure that the collected data are honest, they reflect the real-life situation, and that the data obtained are reliable and valid (Hope, 2005, p. 286).

Procedure

The study will be conducted in Dubai and Abu Dhabi Emirates due to the extensive and widespread establishment of construction companies. The sample respondents will be selected from a population of the construction industry consultants from Dubai and Abu Dhabi. These respondents will constitute a sample of 50 subjects twenty-five selected from Dubai while the other 25 selected from Abu Dhabi. The sample will be assigned numerical means of identification in order to ensure confidentiality and uphold anonymity of data (Muller and Turner, 2005, p. 400). In addition, sample participation will be anchored on voluntary participation criterion. The sample is selected through randomization techniques that entail using simple random sampling method in order to eliminate subjective and personal bias and ensure representativeness of the population within the sample. The consultant and the most suitable target population in this research because they hold sufficient information regarding the situation as experience by the owners, employees, and managers in the construction project (Aliza et al., 2011, p. 15). They hold expertise and experience that is sufficient in providing relevant and sufficient information with regard to challenges of corporate governance systems for the construction project management.

The participants will be asked a range of question regarding challenges experienced in construction project managements, the frequency of occurrences, the control mechanisms, in addition to the effect of these challenges on the construction industry. These questions will be open-ended in nature so that to ensure a detailed response regarding the question at hand. The interview will constitute of five open ended questions that will ensure a complete and conclusive coverage of the subject matter (Knapp et al., 2011, p. 255). Quantified data will be obtained from the review of the literature. Data obtained from both sources will be documented, and presented

in simplified form that utilized descriptive statistics as well as tables and figures in order to ensure clarity and precision of data (Crawford and Cooke-Davies, 2005, p. 47). Moreover, the databases for various construction companies in the industry will be used to collect information that will reflect the nature of challenges encountered in the construction project management. Nonetheless, court's ruling of Dubai and Abu Dhabi will also be utilized in the review of reconciliation and settlements with regard to the arbitration and litigation.

The Instrument of the Study

The interview is the instrument of this study this is because it places variables of interests into perspective (Flyvbjerg et al., 2003, p. 34). These variables are the challenges experience in corporate governance systems with regard to the construction project management. These variables also reflect the impact of these challenges on the construction projects such as competitiveness and sustainability of the project, flexibility of operations, and strategies in use. Other factors such as innovativeness and the implementation of knowledge management in the establishment of optimal strategies based on the absorption and flow of information within the management of the construction project are also reflected. In addition, the review of literature is also instrumental in providing quantified and measurable concepts that reflect challenges, recommendation, and impact of challenges in the construction project management in the UAE (Essig and Batran, 2005, p. 224).

Data Analysis

A concept and opinion analysis will play a significant role in analysing responses obtained from the review of the literature. Moreover, the data obtained from the review of literature will be analysed using inspection analysis in order to capture the manner in which

challenges in corporate governance systems for construction project management affect the operations of the project. Results obtained from the court's rulings, interview, databases, and review of literature will also be analysed using narrative techniques that will reflect the value of the findings and draw accurate conclusions regarding the collected data.

Results

Results obtained from the survey were based on responses obtained from 50 participants. The participants are highly experienced professional who play the role of consultants for key stakeholders in the construction industry. In this study, 25 of the respondents were selected from Dubai emirates and the other 25 were selected from the Emirate of Abu Dhabi. The interview was designed to capture the perspective of these consultants regarding the challenges, their frequency, their impact, and control mechanism in corporate governance systems of the main construction projects in the UAE. These results reflected the actions of project managers, other employees, owners, and consultants. These results were supplemented by results obtained from the review of literature court's ruling, and stakeholders' databases.

Table 1: Summary of the results

1. What are the Sources of challenges in corporate governance systems for construction project management	
Responses	Proportion of respondents who identified the source of challenges
Client	40%
Consultant	20%
Contractors	50%
1.1. Name challenges caused by the sources mentioned	
Clients	<ul style="list-style-type: none"> • Regular interference • Order variation, poor communication,

	<p>and late approval of the order and payment</p> <ul style="list-style-type: none"> • Indecisiveness in decision-making • Constant making of changes • Lack of clear objective with regard to the project • Disturbed flow of cash and irregular payment tendencies
<p>Consultants</p>	<ul style="list-style-type: none"> • Incomplete formulation of contracts and other documents such as drawings • Poor management of design • Delayed approval and slow response with regard to drawings and the construction design • Inadequate inspection during and after the stipulated inspection phases and periods • Poor communication flow and quality control • Incompetence with respect to the technical inquiries of contractors • Incomplete technical staff • Changes in various specification and drawings • Inability to ensure job specialization in accordance to individual capabilities among staff
<p>Contractors</p>	<ul style="list-style-type: none"> • Inappropriate management of the organization • Lack of technical skill • Lack of smooth flow of information in and out of the organization • Poor coordination with contractors delayed mobilization of staff • Poor scheduling and planning with regard to the available resources and the set time • Poor quality control shortage of staff and materials • Unavailability of the requested equipments • Wrong site allocation practices • Irregular payments for the entire construction workers • Inadequate investigation of the site

	<ul style="list-style-type: none"> • Late provision of work permit
2. Name problems that result from poor construction project management	
Responses	Proportion of respondents who identified the problem
Accelerations	54%
Cardinal changes that include the contract breach	76%
Change in the construction plan and procedure	46%
Deficient or defective contract document	62%
Differing conditions of the construction site	56%
Delays	86%
Directed change	40%
Implied warranty	28%
Disruptions	54%
Performance impossibility	66%
Labor strikes	88%
Mal-administration practices	38%
Inferior body and coordination of knowledge	42%
Suspension of the project	20%
Variations in terms of quantities	34%

3. State the areas of effective project management in order to eliminate challenges in corporate governance system for construction project management	
Responses	Proportion of respondents
Project integration	46%
project time management	50%
Project scope management	60%
Project cost management	88%
Project Quality	72%
Project Human Resource	78%
Project Communication	58%
Project Risk management	84%
Project Procurement	90%
Project Safety	98%
Project environment	78%
Project Financial	84%
Project Claim management	60%
4. What factors motivate construction project managers to perform	
Responses	Proportion of respondents
Actions in good faith	80%
Aims and goals specified in the project agreement	88%
Accountability to projects stakeholders	70%
Self-driven transparency based on legal provision in sufficiency disclosures	100%

Adherence to due process	80%
5. What are the Areas that Necessitate Best Practices in the Construction Project Management as a Means of Eliminating and Controlling Challenges in the Corporate Governance Systems	
Responses	Proportion of respondents
Front –End form of planning	50%
Project design	66%
Project processes	86%
Procurement	78%
Startup operations	56%
Workforce	80%
Contracts management and material accuracy and adequacy	74%
Environment, safety, and health	68%
Management of information and use of technological systems	78%
Effective communication networks	70%
Job specification in accordance to skill and experience	52%
6. What factors motivate construction project consultants to perform	
Responses	Proportion of respondents
Actions in good faith	74%
Aims and goals specified in the project agreement	62%
Accountability to projects stakeholders	94%
Self-driven transparency based on legal provision in sufficiency disclosures	96%

Adherence to due process	58%
7. What are the Significant Knowledge Areas for Consultants in the Effective Management of the Construction Project	
Responses	Proportion of respondents
Project Integration Knowledge	60%
Knowledge of the scope of the Project	90%
Project time and schedule knowledge	86%
Project cost knowledge	70%
Project quality knowledge	92%
Knowledge regarding the appropriateness of the workforce e in terms of experience skills and relevant of individual skills with assigned duties and responsibilities	78%
Knowledge regarding effective project communications	66%
Project risk knowledge	92%
Project procurement knowledge	80%
Project safety knowledge	84%
Knowledge regarding project environment and the management of the environment	86%
Knowledge regarding project claims	46%

Sources: Data obtained from the interview

Corporate Governance and Project Managers

Sources of Challenges in Corporate Governance for Construction Project Management

Results show that clients, managers, and contractors are the main sources of construction project challenges. In most cases, these three groups of sources play a significant role in causing project delays. As such, the results in the table provide a summary of challenges and their courses in the construction project management.

As such, these findings reveal six main categories of challenges that include project delay, acceleration in order to beat the deadline, changes, irregular and unfavorable conditions in various construction sites, and reworks as well as extra work.

Moreover, these findings show that the three population of clients, contractors, and consultants who are the main source of project challenges cause different form of challenges that is consistent with their role in the construction project. As such, these findings show that lack of effective organization, planning and preparedness on either of the parties may lead to significant level of challenges in the corporate governance systems for construction project management. This is attributed to the fact that all the challenges caused by each of the parties has a direct impact of the management process of the project. For instance, these findings show that when the client causes regular interferences with the project, establishes poor communication, or order variation, it directly leads to delays, reworks, and extra work that affects the schedule, cost and effective project planning in procurement and project quality assurance. As such, it affects the corporate governance systems in terms of the execution of the managerial roles. the part one of the summary of results table provide detailed information regarding the manner in which various

challenges caused by clients, contractors, and consultants affects the execution of construction project managerial roles under corporate governance system (Wilson, 2006, p. 16).

Assessment of Problems resulting from Poor Construction Project Management

Results obtained from respondents indicate that the projects are bound to face multiple challenges in cases where the management team fails to perform in accordance to the expected standards. However, most respondents also agree that some challenges such as poor weather conditions and loss of key personnel in the company may result to a significant challenge that may not be adequately catered for through effective management (Valk and Iwaarden, 2011, p. 203). However, poor project management may cause diverse impact on the environment. The the second part of the table below shows the responses obtained from the interview regarding significant range of challenges in corporate governance system for construction project management.

This results show that more that 50% of respondents feel that accelerations are significant challenges in construction project management. These respondents recognized that that breach of contract, change in the project, directed form of change, implied warranty mal-administration practices, inferior knowledge, project suspension, and quantities variations are also a cause of concern in corporate governance systems for construction project management. On the other hand, lightly more than 50% of the respondents also believe that differing conditions in the construction sites, performance impossibilities, delays, labor strikes, defective contract materials, cause significant challenge in the management of construction project. As such, the second part of the table provides sufficient information regarding the nature of challenges experienced in

corporate governance systems for the construction project management with the relevant proportion of respondents who identified the challenges.

Areas of Effective Project Management in Corporate Governance Systems for the Construction project management

Results show that managers have a duty to ensure that their managerial roles are executed effectively in all areas of the construction project in order to eliminate challenges and ensure optimal operations processes. The third part of the table reflects the results obtained from the interviews that indicate the views of consultants regarding the main areas of effective management in order to eliminate the occurrences of challenges in the construction management.



Source: (Vafai, 2005, p. 20)

Figure 2: Areas of Effective Project Management in Eliminating Challenges in Corporate Governance Systems for Construction Project Management

These results show that less than 50% of the respondents feel that effective project integration management eliminates challenges in construction project management. In addition, most respondents consider project time management as a significant factor in eliminating challenges. In addition, these respondents identified cost management, quality management, human resources, environmental management, financial management, project communication, and claim management as essential areas of effective management in the control and elimination of challenges. Moreover, almost all respondents identified project procurement and project safety as the main areas in effective project management as they are significant in eliminating and controlling challenges in construction projects.

These results show that most suppliers recognize financial management as a significant element in the elimination of challenges in the corporate governance systems for the construction project management (Vafai, 2005, p. 20). They claimed that lack of timely administration of funds is the most prevalent cause of project delays. In addition, respondents affirm that the financial impact of change in project specification must be placed under consideration in order to eliminate associated challenges that may include extra work hence extra pay, among other factors (Pryke and Pearson, 2006, p. 341). As such, most interviewees proposed minimal changes in project specifications as a cost minimization strategy. This could be achieved through ensuring that initial project planning is carried out efficiently and that it captures all elements of the project in a manner that satisfies the owner, stakeholders, approved by contractors and its cost is within the set budget (Winch, 2000, p. 75).

Projects' Managers Motivation in Project Performance

These findings show that managers of construction projects are driven by various social, legal, and personal factors to ensure smooth running of the project in a manner that curb the occurrence and persistence of challenges in the corporate governances systems (Winch, 2001, p. 803). Section 4 of the table reflects responses obtained from project consultants that show the various drivers that influence managers' performance in the effective running of projects in a manner that limits the occurrences of challenges in the construction project management.

These results show that managers perform their managerial roles out of an act of good faith. This is founded on agency theory that is supported by the notion that project managers are agents of owners and stakeholders (Yip et al., 2007, p. 218). As such, they tend to prioritize the interest of project owners and stakeholders. These results indicate that project consultants believe that managers perform out of the act of good faith. In addition, most respondents feel that the performance of managers in construction project is driven by their need to meet the goals of the project as specified in the construction project agreement. Findings show that that managers are motivated to perform because they are accountable to stakeholders. This is due to the responsibility that managers have that ensures continuously submission of performance reports and to make sure that projects are also completed on the stipulated time based on the laid down schedule. Moreover, all respondents state that legal provisions insufficiency of disclosure are a significant motivator of managers in ensuring effective performance of the project which is consistent with the findings obtained from the review of literature (Yip et al., 2007, p. 218). This is because managers are bound by the legal provision to ensure complete transparency with regard to matters concerning the project in question. These findings also reveal that managers are motivated to perform by adherence to due process factor. This is based on the legal provisions

that govern the acquisition and the use of resources in project development and completion (Wilson and Connell, 2009, p. 25). As such, these findings reveal that due process is indeed a significant aspect of the managers' motivation to perform in corporate governance systems.

Best practices among Managers as a Control and Elimination strategy for Damages in Corporate Governance Systems

Results from the interview show that construction project managers in the UAE can control and eventually eliminate challenges in the corporate governance systems through implementing and exercising strict knowledge management practices in the decision-making processes (Wilson, 2006, p. 16). As such, these results show that best practices and the utilization of information in realizing optimal practices in project management eliminates challenges and expands the scope of the project in a manner that lends detailed and useful information that supports the management structure and ensures the implementation of optimal management practices (Stretton, 2010, p. 58). The fifth part of the table shows the key variables of best practices in construction project management that are significant in controlling and eliminating challenges in the corporate governance systems.

These respondents identified front-end planning, as a significant area in best management practices is effective in challenges control and elimination. Moreover, respondents indicated that best practices in project design, project processes, procurement, and startup operations, are effective in challenges control and elimination. These findings also show that most respondents believe in the significant of the effective workforce, contract management, material accuracy, and adequacy in the management of challenges. Areas of project management such as job specification based on skills and experience, effectiveness of the communication network, the

environment, safety, and health, as well as information management and the use of technological systems are perceived as significant factors in control and elimination of corporate governance systems in the construction project management (Wilson, 2006, p. 16).

The results in this study show that best practices in the construction project management that eliminates and control challenges in the corporate governance systems through providing useful information that guides the completion of the project. This is obtained through showing individual-based best practices in terms of sharing of responsibilities and duties, indicating the proposed framework of best practices, and proving a means of using the available information in the realization of optimal management strategies that ensure the smooth running of the project (Vrijhoef et al., 2003, p. 32). As such, these results show that the implementation of best practices in the construction project management places into perspective such factors as the management of change order challenges, delays, and scheduling in a manner that assesses the impact of all challenges and provides a range of alternative in addressing the issue of concern. It establishes the cumulative impact of challenges, assesses the construction design and planning, and the productivity of labor in a manner that enables the management team to make decisions that lead to effective management (Pryke and Pearson, 2006, p. 341).

Corporate governance and Project Consultants

Results obtained from the interview show that respondents understood their role in corporate governance systems for construction project management. As such, these results show that the role of consultants in relation to challenges in corporate governance systems is significant in the project management. Therefore, results show that consultants must be equipped with sufficient knowledge regarding all matters in the construction project management and

work hand-in-hand with project managers in order to ensure that challenges are placed in check. The motivation of consultants to perform in their duties is essential in the project management because it determines the level of dedication and benefits obtained from consultation services (Patel, 2007, p. 28). As such, the sixth part of the table shows various consultants' motivators that range from social, legal, and economic factors that influence consultants to perform in ensuring effective project management based on accurate, efficient, and improved body of knowledge.

These results from the literature review show that a range of project management challenges faces consultants' performance based on good faith. In addition, these findings also show that consultants' act of good faith is based on the fact that project management is a competitive field where both project owners and managers hold both the bargaining and decision making power over consultants. As a result, consultants tend to prioritize the interests of project owners and managers. As such, these results indicate that 74% of project consultants believe that their performance as consultants is driven by an act of good faith. Despite of the situation in the construction project that places pursuance of project agreements aims and objectives in the hands of project managers and owners, approximately 62% of respondents feel that the performance of consultants in corporate governance systems is driven by their need to meet the goals of the project as specified in the construction project agreement.

In addition, 94% of respondents feel that they are motivated to perform because they are accountable to stakeholders. Moreover, consultants have a need to establish a reputation of reliability hence it makes it necessary for them to be accountable at all times. However, their accountability to stakeholders is expressed through project managers' roles. This is due to the responsibility that managers have that ensures all project participants perform their duties in a

manner that meets stakeholders' expectations and all the goals of the project. Most respondents state that legal provisions insufficiency of disclosure and adherence to due process are significant motivators of consultants in ensuring effective performance of the project. This is because the adherence to due process is usually propagated by managers but instigated by project consultants. These aspects of the project are fundamental because it results to sustainability of consultants operations in the construction project management. In addition, both managers and consultants are bound by the legal provision to ensure complete transparency in matters relating to the project. This is based on the legal provisions that govern the acquisition and the use of resources in project development and completion in addition to information and other resources used in project development and completion processes. As such, these findings reveal that due process is a noteworthy characteristic of the consultants' motivation to perform.

Significant Knowledge Areas for Consultants in the Effective Management of the Construction Project

The seventh part of the table shows significant knowledge areas where respondents need expertise in order to facilitate the challenge prevention, elimination and control strategies. This table reflects the proportion of respondents who acknowledge the need of knowledge and expertise in various knowledge areas among consultants in construction project.

These results show that approximately more than 50% of the respondents recognize the need for the consultant to have knowledge regarding project integration and scope of the project. In addition, these results show that 86% of the respondents see the need for the consultant to understand and hold expertise regarding the appropriate project time factor such as project schedule with regard to supply of materials, project progress, and expected delivery at the

appropriate time. Most respondents stated that the time factor is necessary in eliminating delays and setting practical project schedules. Moreover, the results show that more than 60% of the consultants should have detailed knowledge regarding project costs, project quality, and the in order to perform consultants' duties effectively. This is emphasized based on the fact that consultants have a duty to ensure the implementation of optimal strategies in the project development in a manner that ensures the project has high quality, a wide range of applicability, and suitable for the intended purpose.. This knowledge entails the ability of a consultant to determine the nature of required skills, the appropriate human resource personnel, and the delegation of duties in accordance to the individual-based skills and experience (Rhode, 2007, p. 5). This is significant in ensuring that the project is developed in a manner that upholds quality and timely completion of the construction project.

In addition, respondents assert that consultants must have knowledge regarding effective project communication strategies. This is because most challenges in corporate governance systems for construction project management are founded on the inability of managers to establish effective communication channels among the entire project team members. Furthermore, almost all respondents indicate that consultants require knowledge regarding project procurement, project safety, project environment, and project risks in terms of their assessment and management. This is because project risks are the root-cause of all challenges that corporate governance systems for the construction project management in the UAE. Therefore, these results show that consultants should have extensive knowledge regarding the nature of the project environment, and the manner of managing significant factors in the environment in a manner that is beneficial for the project or in a way that passes limited challenges to the environment in question. Knowledge regarding project claim is yet another

significant area of knowledge for the project consultants. Results show that 46% of respondents stated that consultants should have knowledge regarding project claims (Vrijhoef et al., 2003, p. 32).

Discussion of Findings

The results obtained from this study are consistent with results obtained from the review of the literature. These results show that the main sources of challenges in corporate governance systems are clients, consultants, and contractors. However, it cannot be gainsaid that ineffective project management is the most significant cause of challenges in corporate governance systems (Winch, 2009, p. 339). Even so, these findings show that inefficiencies in the part of consultants, contractors, and clients leads to numerous challenges with regard to the development of the project which in turns causes a wide range of problems to the corporate governance systems for the construction project management. As such, these results show that managers, clients, contractors, and consultants must work hand-in-hand in order to ensure smooth running of the project. In addition, these results reveal a significant number of challenges in corporate governance systems that originate from poor project management (Scott, 2006, p. 286).

These findings are consistent with the findings obtained from the literature review that identify a range of challenges, which results from poor management of the construction project. Findings show that the corporate governance system s for construction project management is bound to face various challenges such as accelerations, change in project plan and procedures, delays, inadequate and defective contract documents, disruptions, and mal-administration among others in the cases. These challenges arise in the case where the construction project

management body fails to execute in role efficiently on all parties and aspects relating to the project development and completion (Patel, 2007, p. 28).

In addition, findings obtained from this study show that consultants play a significant role in corporate governance systems. These findings show that their expertise and richness in terms of knowledge in key areas of construction project management is essential in providing a guideline for effective project management. As such, these findings show that both managers and consultants have a role of ensuring the effectiveness of the management-oriented processes, in addition to making sure that the goals set in the initial design-stage of the project are achieved (Regnery and Schwartz, 2007, p. 87). The identification and in-depth analysis of challenges in construction project management show that corporate governance is an effective in ensuring project quality, effective time management, and cost management are implemented in the project development and completion process. As such, it ensures that the challenges are minimized to a negligible level through enhancing project procures and quality.

The findings of this study show that the identification of management areas, effective planning, and optimal decision-making strategy under effective project management is the main factor in the prevention, elimination, and control of challenges in the corporate governance systems. Results obtained from the study indicate that managers in corporate governance systems use a variety of ways to manage construction projects. These project management methods entail the use of well-defined practices and documentation of key aspects of the management strategies. These techniques include contractors' report, inspection procedures and reports, monthly progress reports, procedure specifications, technical memos, and project schedules (Turner, 2006, p. 95). Therefore, lack of standard measures, precision, and practicality of these documents leads to a significant number of challenges, misinterpretations, and misunderstandings in the

project management. The results obtained from the literature review affirm that organizing all matters regarding managements of the construction project in advance is the main solution to most challenges experienced in corporate governance systems. The inability to organize and control the workforce and the main issues in the projects courses the entire project development team to lose focus on the scope of the project, it introduces misconception of main concepts, misinterpretation of vital information, and other serious factors that lead to challenges in the construction project management process (Rebeiz and Saleme, 2006, p. 25).

Therefore, the results from the interview show that respondents believe that organization of the project issues before and during the project development process is effective in managing challenges in corporate governance systems for construction project management. respondents believe that effective management of the human resources in the most significant means of eliminating management challenges in construction projects. As a result, these findings show that the fact that most respondents feel that managing the workforce is the most essential aspect of project management is attributed to the significance of human resource in the project in terms of design expertise, planning, and implementation of design and project plan. As such, these findings indicate that poor human resource management causes most construction project management challenges. Therefore, inability to organize matters regarding the project and ineffective management of the human resources makes it extremely difficult for project managers to identify themselves with both the project and the labor force. As such, it leads to poor managerial practices as the manager is unable to understanding the challenges, and other issues faced by workers in the construction site (Valk and Iwaarden, 2011, p. 203).

Most respondents state that the setting of realistic and practical project schedules, completion of the project plan, skilled workforce, effective project coordination, and minimizing

design change is effective in ensuring reliability, quality, cost-effective, and on-time completion of projects. These respondents assert on the significance of effective supply chain in the elimination of most project management challenges such as delays, and cost effectiveness. This is based on the notion that effective supply chain also results in minimum changes since the project proceeds as planned. As such, the supply chain is also part of the initial project planning that is initiated at the beginning of project design and development (Rhode, 2007, p. 5).

Results obtained from the review of literature show that consultants need to have a significant level of knowledge in various areas of project management in order to provide their services in a manner that limits challenges in corporate governance system. The findings obtained from interview show that consultants recognize the need for them to possess extensive knowledge in various fields of project management in order to provide beneficial and effective advice to project managers in order to ensure the control and elimination of challenges in the corporate governance systems. These respondents believed that consultants must have detailed information concerning the scope of the project in order to work with the managers in a manner that meets all the expectations of both project owners and stakeholders while at the same time ensure that the project is suitable for its intended purpose. As such, consultants must have the necessary knowledge to advise project managers of the effective manner of solving communication problems; identify the optimal communication strategy, and the manner in which the most efficient communication strategy can be implemented in the project (Turner, 2006, p. 95).

As such, the implementation of corporate governance aspect in the study ensures those stakeholders' and project owners' interest are protected and prioritized throughout the project development process. These findings show that the status of project managers as overseers of the

project development process present a range of challenges with regard to acting based on good faith. In addition, project consultants are not directly answerable to stakeholders and project owners. As such, they also face considerable challenges regarding working based on good faith. In addition, these findings reveal that pursuance of project objectives as a motivator for both managers and consultants to perform is faced with significant challenges because, managers and consultants may end up having their own personal interest that conflict with the project objective, hence causing significant challenges to the corporate governance systems. This results show that in addition, the legal requirement of accountability and transparency enables managers and consultants to perform in accordance to stakeholders' expectations and work in accordance to the terms in the agreement. Such performance enables the team to achieve all projects aims and objectives as specified in the project agreement document (Pryke, 2004, p. 73).

Conclusion and Recommendations

The results obtained from interview study show that the corporate governance systems for the construction project management are faced with numerous problems that are anchored on the inability of project management to ensure effective execution of their role in meeting the quality, cost, and deadline specifications of the project. These results show that challenges in corporate governance system originate from clients, contractors, and consultants. These challenges affect the project in terms of project quality, timely delivery, and meeting the terms, expectations, and objectives that are specified in the contract. These challenges are reflected in terms of accelerations, disruption, project delays, extra work, irregular cash flow, incomplete project plan, poor project design, and project changes to name but a few. In addition, these findings reveal other set of challenges that are experienced in corporate governance systems that include accountability of managers and consultants, acting in good faith in a manner that

prioritize the interest of stakeholders and project owners as opposed to personal interests, and pursuance of project objectives. Nonetheless, this study shows that corporate governance is an essential aspect of project management. Corporate governance systems provide a set of principles, a range of specified responsibilities and legal requirements that provide a guideline for project managers in executing their project management roles.

The results show that effective management under corporate governance system is sufficient in eliminating, preventing, and controlling challenges in the construction projects. These findings reveal these challenges can be controlled and eliminated through effective performance of key parties in the construction project. These major contributors are clients, contractors, and consultants. In addition, the findings necessitate the implementation of effective management strategies in key areas of project management such as cost management, risk management, procurement, project quality management, and human resource management among many others. In addition, these findings show that consultants require extensive knowledge regarding all significant areas of corporate governance system for the construction project in order to offer effective service that will enable managers to formulate and implement optimal strategies in ensuring project quality, sustainability, profitability, and timely completion. As such, these results show that project managers and consultants must work hand-in hand in order to ensure that challenges in corporate governance systems for the construction project management are placed under the control (Turner, 2006, p. 95).

Recommendation

In order to realize best solutions to challenges faced in corporate governance systems for the construction project management the following factors and strategy must be placed under consideration in the management of construction project.

1. Ensure that consultants have detailed information and knowledge regarding main areas of the construction project. These areas include project integration, the scope of the project, project time and schedule management, project quality, project risks, the necessary skill required and the appropriate workforce for the delivery of quality labor, procurement, project, safety, and project environment among others.
2. Ensure that managers implement best practices in key areas of construction project management in order to eliminate and control challenges. These areas include, front-end planning, startup operations, project design and processes, procurement, contract management and material accuracy as well as adequacy, information system management, labor and workforce management and safety, environment and health.
3. Ensure that both consultants and managers:
 - Work in good faith
 - Pursue the aims and objectives set in the project agreement
 - Both managers and consultants are accountable to project owners and stakeholders

- Promote self-driven transparency based on legal provision in sufficiency disclosures
 - Promote adherence to due process
4. Ensure that consultant, contractors, and clients work closely in order to enable the client develop complete and satisfactory idea of the required project in order to eliminate disruptions and interferences

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Appendix

Interview Questions

1. What are the Sources of challenges in corporate governance systems for construction project management?
 - 1.1. Name challenges caused by the sources mentioned?
2. Name problems that result from poor construction project management?
3. State the areas of effective project management in order to eliminate challenges in corporate governance system for construction project management?
4. What factors motivate construction project managers to perform?
5. What are the Areas that Necessitate Best Practices in the Construction Project Management as a Means of Eliminating and Controlling Challenges in the Corporate Governance Systems?
6. What factors motivate construction project consultants to perform?
7. What are the Significant Knowledge Areas for Consultants in the Effective Management of the Construction Project?