

Strategic Approach To Procurement In Construction Industry – A Case On UAE

Richa Thapliyal, Department of Humanities and Social Sciences, Graphic Era University, Dehradun (<u>richathapliyal.hss@geu.ac.in</u>)

Vjay Paul, Department of Humanities and Social Sciences, Graphic Era University, Dehradun (<u>vjaypaul.hss@geu.ac.in</u>)

Shailesh D. Sutkar, Research Scholar, Dept. of Visual Art, Graphic Era Hill University, Dehradun, India.

Abstract:

The purport of construction industry's existence lies in the manner in which the procurement of raw materials and other supplies are being ensured. It is important for the sustenance of the construction industry that these aspects be borne in mind linked with the strategic overview and overarching vision related with the construction sector. The study infers that construction sector's procurement may be improvised by looking at the leadership and motivation dimensions apart from the other components of the value chain. The study concludes with practitioner implications and directions for further research.

Keywords: Construction section, UAE, Strategy.

1. Introduction

As an employee associated with the Al Naboodah Construction Group LLC, I have been closely associated with the procurement strategies adopted by the company in construction work. I had joined the company back in 2010 as a trainee and presently, I am occupying an executive position in the company. Given this long association with the company for about six years, I have learnt a great deal about the company operations and functionalities. While being an active team player in the monitoring, assessment and evaluation of the procurement procedures at Al Naboodah Construction Group LLC, it is my view that the company needs to strategize its procurement processes in a more focused manner.

The main purpose of this report is to underscore the construction procurement strategy of the Al Naboodah Construction Group LLC- a mid-sized construction company based in the

UAE. The report shall underline a framework for a strategic approach to be adopted by the company. The report shall provide a brief overview of the company with which I am associated with for a long time; that is Al Naboodah Construction Group LLC. Further, extant literature on procurement systems and academic perspectives are highlighted. Challenges and opportunities associated with the procurement systems are also highlighted. Thereafter, in view of the literature scanned regarding the procurement systems, the procurement approach adopted by the company is detailed. The same section also underlines a strategic approach for procurement. It is pointed out how the "design-tender" perspective with focus on e-procurement is better suited for the company wherein the independent sub-contractor may undertake the design and building work and the company may look after the overall management of the construction work. Besides, it is also underscored how an independent consultant may be appointed to smoothen out the relationships between the architect, subcontractor and the company. Finally, certain caveats are provided for the company to look into while adopting the new procurement system. The report concludes with an overall assessment and evaluation of the procurement systems in light of the context dealt with in the study. Doubtlessly, the report shall be shared with and among the company employees and it is anticipated that the management representatives shall be able to draw potent lessons for re-aligning the strategy of the company in terms of the procurement procedures and schedules.

2. Literature review

2.1 Background of the company: Al Naboodah Construction Group LLC

The company chosen for the essay is the Al Naboodah Construction Group LLC (www.alnaboodahconstruction.com) which is based in the UAE. As such, the company is a part of the Saeed & Mohammed Al Naboodah Group which is a conglomerate and provides diverse services across multiple sectors. Principally a family-run business, the company also runs independently besides partnership with some of the leading global brands. The company espouses the mission of operating successfully in the Middle East as well as internationally. Besides, the company lays emphasis upon quality and innovation and conducting its operations in a responsible and sustainable manner. The company has won accolades as well counting the 2010 HSE contractors excellence award and the 2003 Dubai Quality Award. The company has completed successful projects in residential and commercial complexes, Dubai International Airport Expansion (Phase Two), Dubai World Central Airport, roads and bridges construction projects of Sowwah Island, Dubai Bypass Phase 3, the construction and design of service tunnels at the Palm Jumeirah, Gravity utility systems and micro-tunneling construction and the like. Further on, the company is engaged in projects like the 79 Villas-Lime Tree Valley, Al Khawaneej Villas, Sienna Lake Villas and Olive Point Villas. Finally, the company is engaged into sustainability initiatives by engaging

the community and providing sustainable environment-friendly solutions. The company has so far been handling only national and local construction projects. However, the company envisions commencing its international projects in Europe, China, India, Australia and the US.

2.2 Dimensions on the construction procurement strategies: Challenges and prospects

In the field of construction sector, procurement of goods and materials constitutes a vital aspect. Therefore, procurement procedures are defined in terms of soliciting goods and services from another entity in return for some consideration. Implicitly, it is relationship between the supplier and the procurer. Procurement is also considered as a "strategy" through which the client's development is satisfied or the operational needs of the client are met with regard to the provision of constructed facilities (Lenard & Mohsini, 1998). It must be underlined that procurement, as such, is not concerned with the main building contract. Instead, procurement is all about the entire project of construction right from the conceptualization of the project work until the completion of the project construction work. In the process of procurement, there are a number of individuals and entities which are simultaneously involved to ease the procurement processes. For instance, there are organizational entities like corporate sector which specialize in the construction and building work. Likewise, there are specific procurement representatives who handle the procurement processes like consultants, specialist contractors, nominated sub-contractors, suppliers, etc. The function of these personnel is to ensure that regular, constant and consistent monitoring and management of the project construction work is accomplished in an effective and efficient manner. Furthermore, there are many dimensions which need to be taken into consideration while appreciating procurement system (Rowlinson & McDermott, 1999):

a. Law: Legal aspects are the sine qua non of any procurement system and since different countries have different contract laws, the legal stipulations pertaining to the context must be respected while procurement processes are underway.

b. Organizational culture: The organizational culture of the supplier and the contracting organization are vital to ensure that a synergy is obtained between the contracting partners and the deals are properly clinched in strict adherence to the legal aspects.

c. National culture: As pointed out earlier, it is pertinent that the topography of the territory be thoroughly studied. This includes an appreciation of the national culture and the general behavioral norms which govern the national culture.

d. Stakeholders: In the process of procurement, there are a number of stakeholders which include the government, contracting partners, supply chain partners, local people, local institutions, political entities and the like.

e. Condition of contract: All details regarding the contract which has been entered into between the parties should be explicitly laid down and there should be no loose clauses in the contract which might invite judicial intervention or unwanted arbitration in the foreseeing times.

f. Leadership: A sound leadership is warranted to ensure that all the steps involved in the procurement processes are adequately followed.

g. Finance: For any construction procurement process, the company should be financially robust and it should be able to make strong decisions.

h. Economics: In some countries, the construction sector has become saturated and therefore, the growth of the sector looks well-nigh dim. However, the construction sector is witnessing a rampant growth in the GCC (Gulf Cooperation Council) and Middle East and North Africa (MENA) regions. Therefore, the economic conditions of a region are important for the growth of a particular industrial sector.

i. Industry: This dimension is linked with the aforesaid dimension and in addition, it may be noted that since construction sector is closely inter-linked with other industries, therefore the growth of a sector becomes contingent upon the growth and performance of the other industrial sector.

j. Politics: The geo-political climate and culture is a major factor which impacts the economy and industrial growth in the region. Therefore, political will is important for ensuring that the country progresses on the path of innovation and progress.

k. Client-team: A well-trained and knowledgeable team is important to man and monitor the progress of procurement processes in the construction company.

l. Construction industry: There is immense competition in construction sector in the UAE. The construction material prices have also soared over the period. This may be attributed to the plethora of opportunities in the construction sector in the UAE region given the burgeoning growth and development of the construction sector.

m. Contract strategy: Procurement processes necessitate signing of contracts among different parties. Therefore, it is important that the legal cell of the company be well-equipped and trained.

n. Culture: A sound organizational culture is important for furthering the growth of the company.

o. Goals: The goals of the company should be as clear as those of the procurement strategy.

p. Motivation: It is important that the motivation to enter into a contract for sourcing material or products from others is clearly laid down.

q. Consultants: Al Naboodah Construction Group LLC has external and internal consultants on board while deciding upon its procurement strategy.

r. Learning: Every procurement procedure is a learning activity in itself. Therefore, while some of the partners or suppliers are quite finicky in their commitment and they may refuse to budge there have been others who have been very forthcoming in terms of their adherence to the procedural norms.

s. Satisfaction: At the end of the day, it is all about being satisfied with the work accomplished. Even at Al Naboodah Construction Group LLC, employees are encouraged to record their daily activities and express their satisfaction with the work done during the day.

t. Performance: Since quality is one of the significant parameters of the company, it is ensured that the company's procurement strategy is fine-tuned towards attaining perfection and satisfaction for all the stakeholders concerned.

u. Development: A lot of emphasis is being given to the training and development of the company's employees.

v. Self-esteem: Procurement strategy of any company should be designed to ensure that ethical considerations are well in place.

A SWOT analysis of procurement strategy is provided in Figure 1.

Strengths	<u>Weaknesses</u>
a. Proper planning;	a. Lack of vision;
b. Proper monitoring;	 b. Lack of collaboration among the partners;
c. Increasing partnerships;	partiters,
d. Profitability	c. Adverse tricks and tactics deployed by partners by not adhering to legal norms

e. Efficiency and effectiveness in construction projects	
<u>Opportunities</u>	<u>Threats</u>
a. Possibility of networking among local, national and international players;	 a. Intense competition from local, national and international players; b. Economy and falling oil prices
b. Increasing brand presence	

Figure 1: SWOT analysis of procurement strategy

2.3 Classificatory framework of construction procurement

Contractual relationships in construction procurement are marked by a gamut of responsibilities and authorities which are shared by the personnel manning the different procurement functions in an organization (Chinyio & Olomolaiye, 2009). Therefore, it is important that all the activities involved in the procurement process are identified, decided and prioritized properly. Besides, it is important that other aspects like cost, time/speed, quality, level of information available, risk allocation, size and complexity of the project, accountability, experience in handling construction projects and supervision dimensions are being adequately monitored (Hughes, Hillebrandt, Greenwood & Kwawu, 2006). However, it has been recorded that these relationships are short-term and confrontational (Pryke & Smyth, 2012). Academic literature outlines three ways of construction procurement: a. Separated: project design and construction are considered as independent phases (Masterman, 2002); b. management-oriented: project design and construction are managed by an external agency/institution/person (Bosher, 2008); c. integrated: project design and construction are closely-integrated and managed by the contracting partner (Masterman, 2002).

Further, procurement systems have been delineated into four categories: price in advance (traditional/fixed price/lump sum); design and build; management contracting; and cost reimbursement (Klinger & Susong, 2006). The "price in advance" classification is based on the assumption that the company appoints an architect for providing the design of the proposed construction work and the architect seeks the approval of the client or company to exercise his free-will in line with the RIBA Plan of Work. It is also possible that contractors may bid competitively and the successful tenderer forges a direct contact with the client (Greenhalgh & Squires, 2011). Furthermore, the responsibility for the design of the building is undertaken by the company while the construction work is undertaken by the contractor. In the next model of "design and build", an agreement is made between a client and a

contracting company and the contracting company bears the responsibility of designing and building a construction work keeping a fixed lump sum into consideration. It is possible that "design and build" may be based on the assumption wherein the client appoints a consultant to accomplish a project and after a contractor has been selected by the client, the bidder completes the remaining design of the construction work (Li, Arditi & Wang, 2012).

Another assumption on which the "design and build" framework rests is when a client offers package deals at reasonable prices. The third assumption is that a turnkey method may be deployed wherein one organization bears the responsibility of total project right from the engineering and design until the completion of the entire construction work (Pryke & Pearson, 2006). The last assumption on which "design and build" may be based pertains to a system wherein the client appoints a consultant and the consultant is responsible for further drawing of the plans and designs (Mincks & Johnston, 2010). Apart from "design and build", "management contracting" is also used as a procurement system in which management contractors are engaged for management and integration of construction work (Broome, 2002). Finally, the last categorization of procurement system is that of "cost reimbursement" wherein a single organization (organization or consultancy) is managed to undertake the design and construction operations and provides reimbursement for the costs entailed by the consultant (Li, Arditi & Wang, 2013).

Yet another classification of the procurement systems rests the on partnering/alliancing/framework agreements which stipulate that contractual boundaries are well-defined for accomplishing a construction project (Jones & Saad, 2003). Besides, all the actors involved in the supply chain management are assigned the responsibility of fulfilling the contracts negotiated with the parent company. Partnering is a broad concept and it is pertinent that a long-term and robust commitment is forged among the contracting parties (Jobin, 2008). Further, it is important that resources be properly shared among the contracting parties and benefits be equally reaped by them. Besides, all the accruing risks need to be equitably divided among the parties while keeping the goals of ensuring effectiveness, quality and innovation in the completion of the construction projects. Implicitly, trust is considered as a major factor in propelling partnership agreements between the affiliating parties (Khalfan, McDermott & Swan, 2007). It is anticipated that more positive and collaborative relationships will result from such partnerships and mutual benefits may be accrued by the affiliating parties. In other words, the efforts of the suppliers are to be recognized in furthering the partnership among the parties. Furthermore, all the members of the project should play an active role in handling and managing the procurement function (Lawrence & Lawrence, 2012).

Five main types of partnerships have been recognized: project-specific partnership, postaward project partnership, coordination agreement partnership, pre-selection arrangement

partnering and strategic or full partnering (Jones & Saad, 2003). Project-specific partnership implies that a partnership between the contracting parties is envisaged mainly for a specific duration of time and the parties work together to complete a specific project only. There are temporary work groups and work teams and these teams work together hailing from different contracting partners from different divisions. Such partnership is temporary in nature and it may be effective only in national or local contractual projects. Post-award project partnership is one where the contracting partners come together to work on a project only after the project has been finally settled at or clinched. No formal talks or agreements take place until the final award of the contract. It is only then that the subcontractors are chosen and further construction work is conducted in line with the project requirements. This partnership is more or less temporary and it lasts only till the completion of the project. It is basically suitable for local or national projects. Unsuitability for international projects is liable because of lack of proper coordination among the affiliating partners. The other form of partnership is coordination agreement partnership wherein international ventures are undertaken and the project makes rapid strides only if there is a proper mechanism of monitoring and control among the contracting partners. This kind of partnership is prolonged and it may last for months or years together. Such partnership requires a proper understanding of the cultures from an international perspective. The contracting partners may choose to work on further ventures and the project is considered as a long-term one. Further, there is a pre-selection arrangement partnering wherein the contracting parties enter into a full-scale agreement to work together even before the contract is actually awarded or signed. This is basically viewed in partners who are informally known to each other and there is deep trust between them. The projects are for long-term and there is mutual understanding regarding the fulfillment of obligations. Usually, national and local construction projects are undertaken in this format. Finally, there is strategic or full partnering which is entered into for the purpose of expansion of activities and the contracting parties enter into negotiation for a long-term. There is a high-risk component involved here and the stakes are high. At the same time, the partnership is strongly entrenched in values and there is commitment from all the contracting parties to continue to work together for a prolonged time. This partnership is most appropriate for strong parties who wish to make foray in international or unknown arena.

2.4 Significance of partnering in project construction work

Partnerships among contracting parties are avenues for furthering the growth and expansion of the contracting parties. There is mutual trust among the contracting parties and the parties sign legal agreements for accomplishing a construction project. It is important that partners be mutually agreeing on many of the written agreements and there should be strict abidance of the legal norms. Furthermore, seven pillars of partnering have been identified (Figure 2): strategy (developing objectives of the client and appreciating how best

these aims may be met); membership (ensuring that the company and its partners have the requisite personnel possessed with the desired skills); equity (ensuring that all those engaged in the accomplishment of a project task are being adequately rewarded); integration (ensuring that there is collaboration and trust among the affiliating partners) (McDermott, Khalfan & Swan, 2005); benchmarks (ensuring that certain targets which meet the desired quality standards at the international level are being set); project processes (ensuring that all the engineering and design processes are well-aligned with the project aims) and feedback (ensuring that there is a robust mechanism of feedback and control such that corrective actions may be taken wherever deviation occurs) (Bennet & Baird, 2001).

Strategy: This is the most important pillar of procurement strategy which is into framing and development of plan for kick-starting any procurement activity.

Equity: This pillar is meant to guarantee that all those engaged in the accomplishment of a project task are being adequately rewarded and there should be no discrimination.

Integration: Proper synchronization of all processes should be there and there should be collaboration among the partnering entities.

Benchmarks: This pillar seeks to ascertain goals are set in line with international benchmarks.

Project processes: It is important to ensure that all the engineering and design processes are well-aligned with the project aims.

Membership: The identification of stakeholders is important for a sound framework of procurement strategy.

Feedback: It provides proper means of addressing any grievances and identification of any loopholes in the procurement processes.

Figure 2: Seven pillars of procurement strategy

3. Construction procurement strategy of the Al Naboodah Construction Group LLC

3.1 Procurement strategy in other companies in the UAE

In the UAE, construction sector has witnessed an exceptional growth over the years. UAE's construction industry has been estimated as Dh 181 billion in 2016 (The National, 2016). It has also been underlined that the UAE construction sector is poised to witness a 4% growth in 2017 (Ventures Onsite, 2016). Some of the major players in the UAE's construction space are General Construction Co WLL, Abu Dhabi Construction Co, Arabian Construction Co,

Royal International Construction Co, Archirodon Construction (Overseas) Co. SA, OGASCO, Union Contracting Company, Turner Construction International, Arabian Constructions Company, Al Nasr Contracting Company, etc. Each of these companies has its unique procurement system while some of these may share some features. For instance, the General Construction WLL follows a "separate" procurement strategy wherein the sub-contractor and the company work independently. Turner Construction International follows a consultancy approach wherein an external consultant is appointed who manages the external dealings with the sub-contractors. Al Nasr Contracting Company adopts an integrated approach wherein the management and design of construction work is integrated. At Arabian Construction Co, the procurement system is based on "cost reimbursement" wherein the consultant is engaged to undertake the operations of the construction work and the money is reimbursed to him depending upon the overall expenses incurred in the management and building of the project. At Turner Construction International, the procurement system is a unique combination of the "design and build" and "management contracting" wherein the company hives off the responsibility of designing and maintenance to a third party besides contracting out main functions and operations to an independent management contractor. Royal International Construction Co follows another strategy wherein "price in advance" is being adopted and the company appoints an architect who lays down the design plan and he secures freewill in completing the construction of the project.

3.2 Procurement strategy currently being adopted by Al Naboodah Construction Group LLC

The Al Naboodah Construction Group LLC follows a robust procurement strategy. In terms of the three-fold classification outlined in the preceding sub-section, the procurement strategy adopted by the company is closely matched with the "separated" category where the sub-contractors work independently of the parent company. Further on, the company deploys a mix of the four categories of procurement systems which have been identified earlier. For instance,

Sub-contractors are engaged for conducting the contracts. Whereas the overall management and coordination is undertaken by the company itself, the sub-contractors are deployed in operative activities. However, the dependence of the company on the sub-contracting partners is not paying off. The relationship with the sub-contractors often falls flat because the sub-contractors do not abide by their contractual agreements. They renege on their word which further causes deterioration in the relationship between the company and the subcontractors. The hazy relationship between the company and the subcontractors in the supply-chain management and further procurement of construction material becomes difficult. This adversely impacts the procurement processes and in turn,

the entire construction project. Overall, the present procurement strategy is negatively impacting the profits of the company.

3.4 Critical analysis of key issues with existing procurement strategy

However, there are a number of challenges which the company is confronted with. Since there are a number of stakeholders who need to be managed for every project of construction at hand, the company finds it difficult to manage all the needs of these stakeholders. At present, the company does not have any dedicated R&D wing or any IT division which might institute a Management Information System (MIS) to manage and monitor the needs and requirements of every project construction work vis-à-vis the procurement processes. Therefore, there are times when the stakeholders get nervous and the relationships with the company get sour over a period of time. Further, owing to the lack of a proper recording of the transactions at the company, it becomes problematic to handle the on-site dealings and making a record of those. There is delay and inefficiency many times and the company stands at a loss losing out on many of the profitable ventures. Conceding that the real estate sector is witnessing a churn in the UAE, it is important that the company gear up to revise its procurement strategy now.

3.3 Proposed framework for the procurement strategy at Al Naboodah Construction Group LLC

It is proposed that the company make certain modifications in the current procurement strategy. For instance, it may be appropriate that the traditional "design-tender" framework be adopted by the company with special focus on e-procurement (Baladhandayutham & Venkatesh, 2012). With the focus on a sophisticated e-procurement system, the concerned users and stakeholders may remain connected all times and with the help of a secure user identification code, access may be gained (Ryal & Samspson, 2009; Yang, Shen, Ho, Drew & Chan, 2009). The "design-tender" framework is also known as the "design-bid-build" approach. With the integration of information technology in the framework, efficiency and efficacy may be better gained. As per the framework, it is pertinent that the client employs two distinct individuals or organizations to independently deal with the design and the construction of the project work respectively (Walker & Rowlinson, 2007). It is proposed that all the responsibilities should be clearly spelt out in the e-procurement system. Therefore, it is implicit that the management and operational dimensions of the construction project work are handled independently and the designing and further construction phases of the project are accomplished in the like manner. By "design-bid-build" approach, it is meant that there are three stages involved in the accomplishment of a project. All the operations should be managed via the online medium and proper personnel should be

available to mentor and manage the e-procurement system (Lu, Liu, Rowlinson & Poon, 2012).

For a company like Al Naboodah Construction Group LLC which is a large conglomerate with sister branches hived off in diverse businesses, it makes sense that this strategy be adopted given the cross-business expertise which the conglomerate is armed with. The first stage is the "design" stage wherein the client appoints an architect and an engineer to identify the needs of the client and formulate the project design in line with the requirements of the client. To facilitate need-analysis, the e-procurement system should be robust enough to identify the demand on as-is-where-is basis and channelize the requirements to the appropriate authority for being tackled effectively. Accordingly, the tender documents are signed and the documentation is further refined in order to provide a conceptual framework to the overall project plan. Signature and documentation may be available online and esignature should be permissible for saving costs and time. Besides, the quantity surveyor hired by the company may determine the costs incurred in the completion of the construction project. Cost management should be handled by the e-procurement system and any financial supplements may be adjusted accordingly. Thereafter, the project managers organize the documents and the next process of bidding (tendering) by contractors is initiated. In this way, the e-procurement system should facilitate the cyclical process of project ideation, launch, approval and implementation with control and feedback mechanisms in place.

In the second phase of bidding, pre-selected contractors are invited to participate in the budding process based on the recommendation of the consultant. The invitation is to be managed via an online system to save costs and time (Yan, Yan & Yin, 2009). The bids received by the contractors are reviewed by the architect as well as the quantity surveyor. In fact, with the help of IT personnel, the e-procurement system may be modeled to check the authenticity and validity of the bids. On the one hand, the architect assesses the technical details of the plan for further designing and operationalization of the design plan besides modifying orders and construction documents, on the other hand, the quantity surveyor is responsible for assessing the bid in terms of the finances incurred in the further completion of the project and the costs of different ingredients used in the further construction work. All the intermediate operations should be made available in the e-procurement system to ensure transparency in operations. Post-inspection and approval of the architect and the quantity surveyor, the bidders are ranked and the client is advised regarding the preference of the contractor. Post-award of the contract, the construction documents are restructured and realigned and legal sanction is secured as well (Murdoch & Hughes, 2008). It is only once the legal stipulations are met that the construction project is actually commenced. While it is understood that the company does appoint sub-contractors and the management of the operational and routine activities are undertaken by the company heads; it is also advised

that suitable personnel be appointed for attaining the overall purpose of managing the entire construction work (Aibinu, Ling & Ofori, 2011). Therefore, right from the inception until the completion of the project work, e-procurement system would be in place to monitor and further the procurement process in an efficacious manner.

3.4 Advantages in the proposed procurement method in Al Naboodah

Principally speaking, choosing a procurement system is fraught with risks. For instance, there might be risks pertaining to allocation of responsibilities and risks among the contracting partners; there might be a case of trade-off between the price for the work and the willingness to accept risk; there might be further perpetuation and distribution of risk in case the risk is shifted to another organization (say, a bank or a financial institution); there might be uncertainty and dynamism in contract prices or the commercial clients may be wary of taking risks at times. While Al Naboodah Construction LLC faces such instances, there are times when procurement strategy needs to be mulled over owing to the non-availability of the right set of actors who might shoulder the risks.

Procurement methods may be categorized in many ways:

a. by the amount of risk which is taken by each of the parties;

b. by the level of information which is available at the time the construction contracts are awarded;

c. on the basis on the way in which the contractor is reimbursed or paid;

d. by the way in which the interaction between the design and construction is arranged and maintained.

In this vein, it may be pointed out that the procurement strategy at Al Naboodah Construction Group LLC is more or less contingent upon the basis of the way in which the contractor is reimbursed or paid. There is little importance attached to the level of information which may be garnered by the other parties. However, this is risky especially because the company has been envisioning a number of construction projects in other countries as well. Without the proper reading of the national culture of the other countries, it might be difficult to conduct the business operations successfully. In this regard, it is important that when the company is proposing to set up its ventures abroad, the eprocurement based "design-tender" framework for procurement is properly implemented even in other contexts. There should be close cooperation between the local and international e-procurement systems and the information should be synchronised appropriately.

Furthermore, procurement of a construction project is contingent upon three dimensionscost which may be entailed in honoring contractual commitments, time/speed with which the contractual obligations are observed and quality of the products and services which are exchanged as a result of contractual stipulation. Thus, priorities should be well-defined by an organization. In this regard, Al Naboodah Construction Group LLC ensures that aspects such as the deadlines of the project, pricing of a project, responsibility of the project processes and complexity of the technology and workmanship in delivering the quality parameters are being met. Besides, procurement strategy is based on the identification of the project needs: cost, time/speed, quality, level of information available, risk allocation, size and complexity of the project, accountability, experience of construction (buildability advise), long-term outlook of the company, level of supervision required at the site of construction work, etc. Al Naboodah Construction Group LLC has been tapping on its committed teams in the procurement division to identify the project needs for making suitable adjustments to its procurement needs.

Furthermore, some of the other advantages which the company stands to gain by adopting the e-procurement system of procurement are the following:

a. Efficient delivery of services: With the IT infrastructure in place, the "design-tender" framework would work best keeping in view the needs and requirements of the stakeholders.

b. Clear lines of authority: With the "design-tender" procurement strategy in place, the company would be able to benefit from the clear demarcation of the responsibilities of the personnel manning different heads and divisions.

c. Better relationship with the stakeholders: There would be better relationship with the stakeholders involved in the construction project as all the processes would be streamlined and there shall be effective monitoring of all the activities in the pipeline.

d. Profitability of the company: In line with the company's vision and mission, the company's profits would witness a rise with the adoption of an e-procurement system based on the 'design-tender' framework conceding the fact that the company would win adequate goodwill and more clients with its reputation of professionalism and efficiency.

3.5 Issues and concerns in "design-tender" framework

Some of the caveats which the company needs to bear in mind while adopting the eprocurement system based "design-tender" framework are as follows: a. Information security should be assured at all levels in the e-procurement system and safeguards should be in place for checking any untoward activity (Rajeh, Tookey & Rotimi, 2015).

b. It is important that all the project participants be actively engaged in the project. Further, the experience and expertise of the project members should be tapped effectively. Since the framework follows the principle of separation of the design phase with the construction phase, it is important that the design and implementation of the project is amply followed as per the strategy outlined in the project document. Furthermore, it is important that the overall contribution of all the members be acknowledged and optimum utilization of resources be ensured by all the project participants.

c. Lifetime costs should be taken into consideration in place of initial costs: Normally, it is the lowest bidder who is awarded the contracts. Whereas the client may find it lucrative, it is important that instead of looking at the short-term perspective, the overhead future costs be estimated to ensure that the quality is not compromised (Cheung, Chan & Kajewski, 2010).

d. Hostile contractual relationships need to be managed well: To avoid any instances of disputes and conflicts, it is important that the conflicting situations be amicably resolved. In cases where the architect and the consultant disagree and the project requires a redesigning, there might be conflicts among the partners.

e. Quality should remain the main concern of the company in the bidding process: Usually, it has been seen that the lowest bid is accepted for further undertaking a construction work. However, it is possible that the quality be compromised in this manner. It is important that while Al Naboodah Construction Group LLC is accepting bids, quality should remain the priority above anything else.

f. Significance of trust among the contracting parties: Improved relationship among the stakeholders and the partnering entities is important for which the e-procurement system would be the facilitator (Weisheng, Liu, Hongdi & Zhongbing, 2013). This would be important conceding the fact that Al Naboodah Construction Group LLC has been engaged in multifarious activities as a conglomerate and there are a number of channel partners who need to be responded to. Therefore, while ensuring that the needs of all the partners are being catered to, the company needs to wary of any disputes. It would be better that the company institutes a proper grievance redressal mechanism to handle any conflicting situations.

4. Conclusion

The report was compiled to probe into the various procurement strategies adopted by construction firms and to focus upon the procurement strategy of the Al Naboodah Construction Group LLC. It was underscored how the company has been adopting a different management culture which is leading to the strained relationships with the contractors and the other stakeholders. Even though the construction sector in the UAE is progressing ahead, there are a number of competitors which are basing themselves in the UAE. Furthermore, the company does not have a proper IT and R&D infrastructure presently. Therefore, it is advised that before embarking on further national and international ventures, the company has a well-institutionalized IT and R&D division in place. In this vein, a proper personnel management is important which may monitor and handle the daily affairs of the two divisions.

It was maintained that while keeping diverse challenges into consideration, the company needs to shift its procurement strategy focus from "separated" to "design-tender" approach. Conceding the different sets of problems with the former approach, the company stands to gain by adopting the latter approach in terms of realizing its vision of quality and innovation. Presently, the company does not attach much significance to the adherence of international values and norms and even during the signing of the contract, there is little significance attached to the information sources and the relevant exchange of views among the internal and external parties. It is advised that the company acquire the necessary information about the contracting parties well in advance before moving ahead with the procurement strategy implementation. With the "design-tender" framework in place, it is anticipated that e-procurement strategy would be adopted by the company. All the transactions should be recorded in the Management Information System (MIS) and there should be proper feedback and control mechanisms in place. This would ensure that all the stakeholders are participating in the decision-making process and there is unanimity of decisions.

As an internal consultant of the company, I hope that with the implementation of the "designtender" procurement strategy, the company would be able to maintain better ties with the partnering entities and complete its contractual obligations in a better manner. Keeping in view the fact that the company is a mid-sized entity and there are further opportunities of allying with partners in the near future, it would be appropriate if the current standing of the company improves in terms of delivering the best services by streamlining and improvising its procurement strategy.

References

Aibinu, A.A., Ling, F.Y.Y. & Ofori, G. (2011). Structural equation modelling of organizational justice and cooperative behaviour in the construction project claims process: Contractors' perspectives. Construction Management and Economics, 29(5), 463-481.

Baladhandayutham, T. & Venkatesh, S. (2012). Construction industry in Kuwait-An analysis on e-procurement adoption with respect to supplier's perspecive. International Journal of Management Research and Development, 2(1), 1-17.

Bennett, J. & Baird, A., (2001). NEC and partnering: The guide to building winning teams. London: Thomas Telford.

Bosher L. (2008). Hazards and the Built Environment: Attaining Built-In Resilience. Oxon: Taylor & Francis.

Broome, J. (2002). Procurement routes for partnering: A practical guide. London: Thomas Telford.

Cheung, E., Chan, A.P.C. & Kajewski, S. (2010). Suitability of procuring large public works by PPP in Hong Kong. Engineering, Construction and Architectural Management, 17(3), 292-308.

Chinyio, E., & Olomolaiye, P. (2009). Construction Stakeholder Management. Oxford: John Wiley and Sons.

Greenhalgh, B. & Squires, G. (2011). Introduction to Building Procurement. Oxon: Taylor and Francis.

Hughes, W.P., Hillebrandt, P., Greenwood, D.G. & Kwawu, W.E.K. (2006). Procurement in the construction industry: The impact and cost of alternative market and supply processes. London: Taylor and Francis.

Jobin, D. (2008). A transaction cost-based approach to partnership performance evaluation. Evaluation , 14(4), 437-465.

Jones, M., & Saad, M. (2003). Managing innovation in Construction. London: Thomas Telford.

Khalfan, M.M.A., McDermott, P., & Swan, W. (2007). Building trust in construction projects. Supply Chain Management: An International Journal, 12(6), 385-391.

Klinger, M. & Susong, M. (2006). The construction project: Phases, people, terms, paperwork, processes . Chicago: American Bar Association.

Lawrence, F., & Lawrence, B. (2012). The management of construction: A project lifecyce approach. Oxford: Routledge.

Lenard, D. & Mohsini, R. (1998). Recommendations from the Organisational Workshop, CIB W-92 Procurement – The Way Forward, The University of Montreal, 18–22 May Davidson C. H. and T. A. Meguid, CIB, 1, pp. 79–81.

Li, H. , Arditi, D. & Wang, Z. (2012). Transaction-related issues and construction project performance. Construction Management and Economics , 30(2), 151-1644.

Li, H. , Arditi, D. & Wang, Z. (2013). Factors that affect transaction costs in construction projects. Journal of Construction Engineering and Management , 139(1), pp. 60-68.

Lu, W.S., Liu, A.M.M., Rowlinson, S.M. & Poon, S.W. (2012). Sharpening competitive edge through procurement innovation: perspectives from Chinese international construction companies. ASCE Journal of Construction Engineering and Management, 139(3), 347-351.

Masterman, J. W. E. (2002). Introduction to building procurement systems. (2nd ed.). London: Taylor & Francis.

McDermott, P., Khalfan, M.M.A. & Swan, W. (2005). Trust in construction projects. Journal of Financial Management of Property and Construction, 10 (1), 19-31.

Mincks, W.R. & Johnston, H. (2010). Construction jobsite management. New York: Cengage Learning.

Murdoch, J. & Hughes, W. (2008). Construction contracts: Law and management , (4th ed.). London: Taylor & Francis.

Pryke, S. & Pearson, S. (2006). Project governance: Case studies on financial incentives. Building Research & Information , 34 (6), 534-545.

Pryke, S. & Smyth, H. (2012). The Management of Complex Projects: A Relationship Approach. Oxford: John Wiley & Sons.

Rajeh , M., Tookey , J.E., Rotimi , J.O.B. 2015. Estimating transaction costs in the New Zealand construction procurement: A structural equation modelling methodology. Engineering, Construction and Architectural Management, 22 (2), pp.242 – 267.

Rowlinson, S. & McDermott, P. (Eds) (1999). Procurement systems: A guide to best practice in construction. London: E&FN Spon.

Ryall, M.D. & Samspson, R.C. 2009. Formal contracts in the presence of relational enforcement mechanisms: Evidence from technology development projects. Management Science , 55 (6), 906-925.

The National. 2016. Dubai's Expo 2020 infrastructure spending to boost UAE construction sector. Available at <u>http://www.thenational.ae/business/property/dubais-expo-2020-infrastructure-spending-to-boost-uae-construction-sector</u>, accessed on 3rd February, 2017.

Ventures Onsite. 2016. UAE construction sector to witness 4% growth in 2017. Available at <u>https://www.venturesonsite.com/news/uae-construction-sector-to-witness-4-growth-in-2017/</u>, accessed on 3rd February, 2017.

Walker, D. & Rowlinson, S. (2007). Procurement systems: A cross-industry project management perspective . New York: Taylor & Francis.

Weisheng, L., Liu, A.M.M., Hongdi, W., & Zhongbing, W. (2013) Procurement innovation for public construction projects: A study of agent-construction system and public-private partnership in China. Engineering, Construction and Architectural Management, 20 (6), 543 – 562.

Yan, M., Yan, L. & Yin, L.L. (2009). Research on the present situation and problems of agent construction system for government investment projects based on project critical governance factors. Shanghai Journal of Economics, 8(8), 33-41.

Yang, J., Shen, G.Q., Ho, M., Drew, D.S. & Chan, A.P. (2009). Exploring critical success factors for stakeholder management in construction projects. Journal of Civil Engineering and Management, 15(4), pp. 337-348.