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Building Ethics in Construction Partnerships

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Introduction

Improvements in the management of construction, the largest industry in the world, benefit all stakeholders. Improved productivity through virtuous collaborating will aid in bringing to the owner a quality facility, in a shorter time, at lower cost. The architect/engineer spends less effort acting as the referee between disgruntled owners and contentious contractors, and instead focuses on their value-added design activity. Constructors focus on their strengths of quality work and efficient building execution, while minimizing the wastes from claims, litigation and damaged relationships. All enjoy improved participation in congruous partnerships based on integrity and trust that lead to repeat business and greater profitability. The eventual tenants will enjoy a suitable environ that meets their needs. From a broad perspective, the home community benefits from safe environs for their citizens as living space, working locale, and a place to enjoy life.

The crux of the problem is “how to get the best brick for the buck.” Research on ethics in construction (Moylan, 2005) determined the suitability of a values-based leadership approach for the construction industry, with a focus on improving the contractual partnerships. The construction industry is keen on fostering a high degree of professional ethics in the business dealings between owners, architect / engineers, and constructors. Ethics in construction mirror the tenets of values-based leadership, stressing the need for shared values, integrity in the bidding and contracting processes, common understanding of professional practice, partnering, balancing of risks with financial rewards, and, the building of long-term trusting relationships (Gill, 2004; James, 2003).

This paper, based on the research conducted by the author on this topic, addresses the applicability of values-based leadership concepts to the building of ethical partnerships on construction facilities projects.

Background

Construction, the largest industry in the world, comprises over 40% of the USA gross national product. Although some global constructors perform billions of dollars of construction worldwide, no one company has the majority of the work in any one sector (Gould & Joyce, 2003). It takes considerable time, finances, and effort to realize a new facility from "cradle to grave" including the initial concept, design, bidding, and the actual construction (Angus, Gundersen & Cullinane, 2000). Construction is a highly fractionated industry of specialty

companies that work on temporary projects, executing their services though short-term contracts and temporary partnerships (Gray & Larson, 2000). The long-term relationships between the different stakeholders have seemingly contrary professional values and business missions. To establish the appropriate ethics and proper professional conduct in construction requires an understanding of the motivations (values) of those involved (Meredith & Mantel, 2003).

Organization of the Construction Industry

The construction industry divides nominally into four major sectors of residential development, commercial, industrial, and heavy / highway, and further subdivides by specialty / 'trade' activity. Construction business entities organize functionally around the delivery methods applicable to obtaining construction work (Lewis, 2001). The next section reviews the delivery methods, both common and alternative, and, other methods to improve the process.

Construction Project Delivery

In construction, the major parties include the facility owner, the architectural / engineering firm that designs the facility, and the contractors that build the facility (Liebing, 2001). During the conceptual and design phases, the architect / engineer work in close contact with the owner to translate the facility requirements into a viable design. During the bidding phase, the A/E firm transitions to the role of ‘implementation advisor,’ and then ‘inspector’ during the construction. Due to the uncertainties inherent in conceptual work, the A/E will contract with the owner on a cost-fee basis. In contrast to the agency-relationship of the architect/engineer, the general contractor functions as an independent entity vis-à-vis the owner (Sweet, 2000). The general contractor competitively bids the construction work as detailed in the design package and performs the work for a specified price. They "own" the construction methods and means to complete the work without interference (most of the time) from the owner, with general oversight for work quality by the architect/engineer (Fisk, 2002).

On private / non-government projects, the bid solicitation can be 'open' to any interested, qualified bidder, or, 'closed' to a select group chosen by the owner / contracting officer. On publicly funded work and government projects, the bidding is open to all interested, qualified contractors (Collier, 2001). In both situations, potential bidders go through a qualification process, prior-to or as part-of the bid submittal. The purpose of bidder qualification is to ensure that only bidders with the proper technical expertise, financial capability, project experience, and available resources are awarded the contract. A pre-bid qualification performed prior to the bid documents release is preferable, as it saves time and money for both the potential bidders and the contracting agency. The construction companies with the right stuff are allowed to submit a proposal; contractors deemed unqualified will not be taxed with the considerable unpaid effort involved with developing a complete priced proposal (Gould & Joyce, 2003; Liebing, 2001).

Traditional Delivery Methods

The traditional method of delivering a constructed facility is the design-bid-construct process. In this scenario, a series of general contractors independently develop and submit a competitive lump sum priced proposal for the construction of the facility as defined by the bid package prepared by the architect / engineer. The GC's lump sum bid is for the total cost of the construction work including management, coordination, subcontracts, supplied material, other services, and, overhead and profit (Clough & Sears, 2000). For construction in which the completed in-place quantities are not certain at the time of bidding (e.g., highway construction), a unit-rate method is appropriate. On fast-track construction, with concurrent design and construction activity, a cost-plus basis will meet the owner's time schedule. For projects with a high amount of risk, such as undefined design requirements, a time-and-materials basis is best. In each case, the method for delivering the constructed facility by the constructor to satisfy the needs of the owner as defined in design package balances the risks of the construction process with the certainties and unknowns (Gould & Joyce, 2003).

The traditional approach of design-bid-build is the preferred construction delivery by owner and constructor for commercial construction. The advantages include an industry familiarity with an accepted method, a sequential process of a complete design and a stated maximum price prior to construction starts, owner coordination over the architect / engineer and general contractor, and, less risk for all parties (Sweet, 2000). However, disadvantages persist. The sequential process of design-bid-build is a less efficient use of time and money. The long period between capital outlays and facility use delays the return on investment, exposure to inflation, and slows occupancy (Sweeney, 2001). The long lead times of the process does not allow fast reaction to swings in the market place. Another disadvantage is that the business philosophy focusing solely the "best price" is counterproductive. This thinking leads to the cheapest, short-term solutions for a facility that will need to last a long time (Sweet, 2000). Further, a focus on lowest price is a continual cause of disputes, pitting the constructor against the owner and architect / engineer over acceptable quality and satisfactory solutions to design intent and contract specifications. In addition, the owner organization will require a fair amount of expertise to manage the design and the construction (Smith, Currie & Hancock, 2001). Still, construction takes too long to complete, costs overruns are common, the quality of the facility does not meet the needs of the tenants, and owners are generally not satisfied with the experience (Meredith & Mantel, 2003). To deal with these deficiencies of the traditional construction contracting approach, several alternative methods of contracting are now in use, as discussed in the next section.

Alternative Contracting Methods

Proposed alternative methods in contracting for construction to improve these inherent disadvantages include the approaches of multiple-prime contracting, construction management, and design-build. In multi-prime contracting, the owner contracts directly with a number of specialty or trade contractors without the use of the 'go-between' general

contractor. The apparent cost savings to the owner include the elimination of the general contractor's profit margin and the general contractor's markup on their subcontractors and suppliers (Gray & Larson, 2000). Multi-prime contracting lends itself to a fast track, phased approach. The hazards of this approach are the need by owner for proper planning, scheduling, and coordination of the work of all specialty / trade contractors and suppliers (Smith, Currie & Hancock, 2001). In effect, the owner takes on the role of the general contractor and the attached responsibilities, especially safety (Coble, Hinze & Haupt, 2000). Ignorance of the law is never an excuse for non-compliance (Richter & Mitchell, 2002).

Another alternative method is to replace the contracts with the architect / engineer and the general contractor with a single agreement with a construction management firm. The construction manager, involved on the project from concept through commissioning, requires diverse expertise in design, construction, management, and associated skills to perform the project on a “turnkey” basis (Gido & Clements, 2003). Two contract schemes are possible. One scenario has the construction manager functioning as a direct agent of the owner, managing the owner's contracts made directly with a series of designers and prime specialty / trade contractors. The owner has a 'say' in the sub-contract awards by the CM. The other construction manager scheme has the CM-firm involved in the concept and design work on a cost-reimbursable basis that leads the development of a guaranteed maximum price ("GMP") contract for the construction work, on an “at-risk” basis. The construction manager's coordination duties during the construction phase are essentially equal to the traditional general contractor role (Gould & Joyce, 2003; Smith, Currie & Hancock, 2000).

The third alternative delivery method is design-build contracting (Liebing, 2001). In this situation, the construction entity acts as the "master builder" and is responsible for both design and construction. Such a "marriage" partnership includes a certain level of inherent risks (as in 'putting all of ones eggs in one basket'). From an owner perspective, the positive aspects of the dual responsibility housed in one entity avoids the "trailer war" recriminations and potential legal battles common on many construction projects. These unpleasant scenarios pit architect / engineer against the contractor over the design guarantees as suitable for operational use, constructability, and delay claims (Sabo, 2001). This delivery method requires the owner to adequately define their desired facility, communicate regularly, and, cooperate with the design-build firm. The successful design-build project has a fair allocation of risk between both parties, a reasonable interpretation of the contract, a clear scope of work, acknowledgement of responsibility, acceptance of change, and good faith cooperation between the parties (Martin & Schinizinger, 2001).

None of the three alternative approaches is a panacea. Each alternative construction delivery method can provide the owner with a high-quality facility, built on time and within budget. However, each method of construction delivery requires the owner to be willing to commit the necessary time and resources to project definition and actualization. In turn, the constructor must be ready, willing and able to commit the necessary resources (responsible) and exhibit the requisite cooperation to work with the owner and other parties (responsive) in

the execution of the contract work (Lewis, 2001). The next section reviews other alternatives in the bidding and contracting scheme tried with varying results.

Other "Improvement" Schemes

Additional methods tried within the construction industry to reduce construction costs and/or win unfair advantage over competitors include bid shopping, bid rigging, and reverse auction bidding (Sweeney, 2001). In bid shopping, the contracting agent 'shares' the confidential bid proposals submitted by other bidders with a favored contractor. The intention is that the favored contractor will then submit a proposal priced below their competition, ensuring them the contract and the owner the lowest price. In bid rigging, a group of contractors conspire amongst themselves to submit inflated bids to the contracting officer, while allowing a chosen conspirator to 'win' the contract award with a higher margin. Another variation of bid rigging involves the contracting officer and certain select bidder/s conspiring on certain criteria, either financial or technical capability, that will exclude a broader range of bidders from competing for the contract work.

For instance, the contracting officer uses the competitively bid proposals from several "outsiders" to check the prices and keep honest the "insider" contractor whom the owner privately pre-selected to perform the work. The reverse auction bidding process uses the Internet for on-line submittals and communication between the contracting agent and the community of bidders. This scheme pits one construction contractor against another in a continual bidding "war" requiring the bidders to undercut each other until the contracting agent is satisfied with the lowest bid price. This "last man standing" strategy intends to get the lowest price from the market place, yet exposes all sides to the risk of undercutting quality and performance (Bockrath, 2004; Sweet, 2000).

In whatever the delivery method used, there must be a partnership of trust between the parties. The next section reviews the author's research on building ethics into the construction partnership based on shared values.

Research on Values-Based Leadership

The author's research (Moylan, 2005) considered the applicability of the values-based leadership construct to the processes of managing major constructed facilities projects. The supporting research demonstrated the correlation between values-based leadership skills, values, and concepts, and, the instilling of sound ethical conduct by all parties involved, as important components in improving the management and business performance of constructed facilities projects.

Mixed Methods Research Approach

A mixed methods research approach using both a quantitative survey and qualitative discussions was used. The criteria for performance excellence embodied in the Malcolm

Baldrige National Quality Award (2004) offered the framework to develop the working list of research questions, both qualitative and quantitative. Leadership, one of the seven categories that make up the core values and concepts, "examines how the organization's senior leaders address values, directions, and performance expectations, as well as a focus on customers and other stakeholders, empowerment, innovation, and learning" (Baldrige, p. 13). (The other categories include strategic planning, customer and market focus, measurement, analysis and knowledge management, human resources focus, process management, and, business results.)

From the Baldrige criteria on the interrelated core values and concepts, the items addressing values-based leadership were melded into the respondent quantitative survey elements. These items include: 1) visionary leadership, 2) customer-driven excellence, 3) organizational and personal learning, 4) valuing employees and partners, 5) agility, 6) focus on the future, 7) managing for innovation, 8) management by fact, 9) social responsibility, 10) focus on results and creating value, and, 11) systems perspective. From the Baldrige (2004) category on organizational leadership, especially on senior leadership direction, the list of qualitative research questions that cover the elements of values-based leadership, were used to create the discussion items for the in-depth interviews and focus groups. The discussion items included setting and communicating organizational values, creating value for stakeholders, ensuring two-way communication, creating an environment for empowerment and organizational learning, and, creating an environment that fosters and requires legal and ethical behavior.

Quantitative Survey Results

86 respondents completed the quantitative survey out of the 399 solicited. Responses came primarily from construction management firms, design builders, and general contractors based in the state of Michigan, along with owners, consultants, educators, and trade associations. In addition, persons who were part of the focus group discussions completed the survey. The survey collected biographical data on years in the industry, position, and, type of firm/organization.

The quantitative survey results show the construction industry holding these values in this order of importance. Strongly held beliefs (greater than 95% agreement) include a focus on results and creating value (100%); valuing employees / partners and a focus on the future (both 98.84%); organizational / personal learning and social responsibility (97.68%); management by fact (97.67%); and, visionary leadership and management for innovation (95.35%). Well-held beliefs (great than 90% agreement) include customer-driven excellence (91.86%) and agility (90.69%). A held belief (greater than 85% agreement) is systems perspective (86.04%).

The survey data shows a balanced increase up to an ultimate plateau, or Gaussian distribution, of complete agreement with the Baldrige ethical values based on the respondents' years in the construction industry. The composite response for the respondent's position shows an inverted-V shape distribution. The Project Engineer experience-level case (98%) dips by 6% to the Middle Management level case (92%) then rises up by 4% to the Executive level case

(96%). The survey responses showed the greatest dispersion in the replies among those who hold middle management positions and are 'new' to construction industry; for example, a human resources manager for a general contractor. Positions with the tightest affinity (i.e., all responses at 'strongly agree') to the ethical leadership values are distributed evenly throughout the position classifications and by years of experience.

Qualitative Survey Results

A total of sixteen (16) people participated in the qualitative portion, seven (7) in a focus group session, and nine (9) in individual intense interviews. Five (5) of the participants work for construction entities, three (3) with architectural / engineering firms, three (3) represent facility owner companies, three (3) with university / training organizations serving the construction industry, and, two (2) are executive director level with construction trade/industry organizations.

The results of the qualitative portion of the research show strong although not absolute support of the author's hypothesis of "values-based leadership skills, values and concepts are highly applicable to the processes of project management, in particular, in the leading of constructed facilities programs from concept through completion." The responses to the discussion questions developed from the Baldrige (2004) category on organizational leadership relate relatively to the principles of values-based leadership postulated by Fairholm (1997, 1998).

The qualitative results show a strong correlation between the VBL principles and most of the leadership requirements. The leadership requirement for deploying organizational values, directions, and performance expectations relates to the second principle of values-based leadership, which considers the leader's role in developing and deploying a vision based on core values of the organization. The balancing of value for stakeholders relates to the first VBL principle concerning the leader's role in stakeholder development while focusing on accomplishing the vision. Communicating organizational values, directions, and expectations to all correlate to the third VBL principle relative to how effective leaders create a culture supportive of the core values that help contribute to the team members achieve their personal goals. Ensuring two-way communications align with the fourth VBL principle that correlates leader preparation for personalized relationships with followers and reinforces personal values, self-purpose, and two-way exchange in a council-like setting. The leadership requirement for creating an environment for organizational and employee learning squares precisely with the fifth VBL principle that requires the values-based leader to be a teacher of their followers, coaching on improving personal relationships, work skills, and, attitudes to enable, empower, and energize them to greater performance. Creating an environment for legal and ethical behavior correlates clearly with the sixth VBL principle of the leader's dual goal of producing high performance and self-directed followers with inherent loyalty to the organization and group mission.

In regard to creating an environment for empowerment, innovation, and organizational agility, the results of the interviews and the focus group discussions were not consistent with the philosophical base for VBL (Fairholm, 1998), in which leaders act with consistency, trustworthiness, and with enthusiastic support to empower their followers. On this aspect, the qualitative research results do not show strong adherence to the VBL principles by constructors.

Conclusions and Recommendations

The principal conclusion drawn by the author from the results of the mixed methods research is that values-based leadership offers the construction industry a comprehensive methodology to pursue building just, participatory, and sustainable partnerships. The most prevalent values among the major stakeholders in the construction industry are the requirements of trustworthiness in developing harmonious business relationships, the opportunity to earn a just profit for the associated risks, and, the need for integrity and trust in collaborating. The author recommends the construction industry embrace values-based leadership concepts, values, and skills as the foremost leadership construct in building ethical partnerships among stakeholders of constructed facilities projects.

A second general conclusion the researcher found is that ISO-9000 certification signifies a particular construction / design entity's adherence to developing ethical-based partnerships, and the organization's conscious intent on conducting themselves in the utmost ethical manner possible in serving their clients and in partnership with their fellow subcontractors, suppliers, and associates. The owner organization desirous of ethical collaborating on the design and construction of their facility should require ISO-9000 certification as a qualification requirement.

A third general conclusion drawn from the results is that the strength of the ethical beliefs and values of all those involved is a function of their proximity to the 'epicenter' of the construction action more than any other criteria. The stakeholders most involved working "in" the business of construction, as opposed to those in various supporting roles working "on" the business of construction; hold the strongest beliefs concerning ethics and values-based leadership. The researcher recommends that the construction industry partners actively engage in training and professional development programs that included leadership and ethics as core topics.

The strongest held values amongst the constructors are a focus on results and creating value (quantitative survey results), and, ensuring that the organization has well-articulated values that are made well known throughout the entity (qualitative interview results). The lowest held belief with the greatest dispersion is the systems perspective (quantitative survey results), and the creating of an environment for empowerment, innovation, and organization agility (qualitative interview results). This situation is consistent with the conservative nature of the construction industry. There is a strong focus on completing the specific project scope per the specified time, cost budget, and quality constraints, to meet the expectations of the client. The

construction project team may exhibit creativity in project execution as long as they stick to the project constraints and stay within the established parameters, which is a very transactional leadership environment. The research suggests the construction industry explore the melding of a systems approach to the achievement of project outcomes, and, the consideration of "team empowerment" as a company value.

One final insight is that the construction industry values highly values-based leadership and the need for strong ethical practices by the members. However, the participants generally seem unaware of the formal process of ethical leadership and exhibit a subconscious competence in leading based on shared values and common satisfaction of mutual goals. In an industry that is very dependent on trust among the participants for mutual satisfaction, leadership based on shared values is essential. The author recommends that constructors continue to strive to exhibit "walking the talk" concerning ethical conduct.

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