

Professional Ethics in Construction Industry

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Abstract

The pursuit of moral knowledge dates back for thousands of years to the time of Socrates, Aristotle and Cicero, but it was mostly the influence of moral thought that continued to shape ethics today. Thus, ethics could be defined in easy terms as the study of what is morally good and bad. Consequently, this paper specifically illuminates the issues faced by construction stakeholders to explain how important ethical behavior is, and to evaluate the level of professional ethical standards and its practice in the construction industry in the world today. For this purpose, the survey performa was distributed among various stakeholders within the construction industry, i.e. owners, architects and engineers (A/E), construction managers, general contractors and subcontractors, determining results from the survey analysis showing that ethics is neither emphasized as black nor white, but actually falls under the category of grey area verifying that it is not definite.

Keywords

Construction industry, ethical behavior, survey performa, survey analysis

1. Introduction

Within a construction organization one can find many characteristics that will distinguish it from any other industry allowing it to play an important role in the development and sustainability of the economy. Consequently, understanding that importance and its benefits compels that construction professionals must have a high level of professional ethics, including (but not limited to) honesty, integrity and fairness. Unfortunately, this is not always the case as some construction professionals have twisted their profession with unethical behavior resulting in the negative impact on safety and quality of construction projects that may affect the economy of the country.

Ethics in general can be defined in multiple ways; however all of these definitions have the same general concept, that human behavior has consequences for the welfare of others. Ethics is a branch of philosophy dealing with values relating to human conduct, with respect to what is “right” and “wrong” of certain actions and the motives and end results of such actions within an organization (Spier, 2012). Kilbert (2008) also defines ethics under normal circumstances referred as a relationship between people by providing rules of conduct generally agreed to govern the good behavior or actions of contemporaries which are habitually developed in an individual throughout life based on a wide variety of factors and are

not considered absolute rules. As a result, many people simply consider their intuitions to be all the ethical guidance they are required to get the job done (Summers, 1996).

Nowadays, all professional groups prefer to have their own specific group of requirements known as 'professional codes', with the purpose of reflecting the parameters of normative behavior within the profession. These codes basically reflect a sense of responsibility and obligation of the professional towards peers, clients and the general public. The reason behind the existence of such professional ethics in today's world is to identify moral standards and assessments, judgments and concepts, and characterizing people as representatives of a particular profession. For Example: developing norms, standards, requirements and typical to certain activities.

However, Fan & Fox (as cited in Hamimah et al, 2012) criticizes that, despite having these professional codes, there are few major ethical issues that have been mostly observed in an organization, for instance, inadequate safety standards, reverse auctions, over-billing, bid shopping, bid-cutting, cover pricing, poor workmanship, insufficient legislative enforcement, late and short payments, lying, poor documentation, inflated claims, false claims, threats, fabrication of records, fierce competition, personal gain, results and actions of the current economic downturn etc.

These issues of ethics that exist in the world of business have been with humanity since the age of Cicero (106 B.C. – 43 B.C). Thus, an entire philosophical work was devoted and written on the subject of ethics titled "*De finibus bonorum et malorum*" or "*About the Ends of Goods and Evils*". During this age, the businessmen mostly preferred to prioritize profit, but when the pursuit of profit conflicts with common good, then the common good takes priority (Goldin, 2006). So since ancient times, owners feel that ethics are related to profit and focusing only on making the business grow, increasing sales and revenue where the adage, 'Learn by example' is used in the wrong way by employees of an organization, when it comes to professional ethics.

2. Literature Review

The pertaining literature is presented in succeeding sub-sections.

2.1 Unethical Behaviors in the Construction Industry

Few common unethical behaviors observed in the construction industry are:

Bid shopping is the practice of revealing a contractor's bid to other prospective contractor before the award of a contract in order to secure a lower bid (Degn & Miller, 2003). However, lowered bids may lead to cost cutting in the construction process, primarily in materials and labor, which may lower the quality of the work performed (Degn & Miller, 2003). Thus, it was generally concluded that violations of these laws may result in penalties and/or cancellation of contract.

Reverse auction is another form of bid shopping regarded as a bidding event hosted by an owner with a fixed deadline, where bids are posted on the internet. Thus, multiple contractors and suppliers compete for business where each competitor's subsequent bid must be lower than the previous bid (Degn & Miller, 2003), though they do not know the identities of specific bidders. Hence, in most cases as a consequence, the lowest bid is selected. Due to its quick serviceability, online reverse auctions are nowadays being commonly used to find the lowest bidder on construction services. However, this procurement method may appear to be a high-tech innovation, ultimately, it only propagates the negative results brought about by low-bid and price-only selection resulting in the contravention of federal procurement laws, hence,

does not guarantee the lowest price for owners and may encourage imprudent bidding practices (Degn & Miller, 2003).

Bid peddling occurs when a subcontractor who is not selected for a construction project solicits the prime contractor to substitute his/her company for a subcontractor on the original bid by offering to reduce its price (Degn & Miller, 2003). Bid peddling may be viewed as bid shopping in reverse.

Over-billing is the most common unethical practice in the construction industry that occurs when the contractor develops a schedule of values as a device for quantifying the value of a work activity on the project while the subcontractor bills for more work than is actually performed or when the value placed on a work activity exceed its cost with reasonable overhead and profit (Clough & Sears, 2005).

2.2 Ethics as Grey Area

The issue of ethics being a grey area goes back to the time of Socrates (470 B.C. – 399 B.C.) credited with making major contributions to the application of ethics which only the people of the 21st century can understand it today (Parker & Pearson, 2005). It is due to the fact that Socrates thought that there may not be a correct answer or more than one correct answer exist, which makes the subject of ethics a grey area and not black or white (Parker & Pearson, 2005).



Figure 1 – Ethics shown as grey area

As shown in the Figure 1, the black area (designated by RULES – NO GO) signifies that to proceed in this direction is wrong and against the rules. The white area (designated by RULES – GO) means that to proceed in this direction is within the rules, established by either monthly reporting required by shareholders or contractual obligations. The grey area is located in between the black and white areas comprised of events and circumstances that are not prescribed or defined by set of rules, for example, complex problems or unavoidable dilemma.

2.3 Why Ethics has become an issue?

According to a survey directed by the Construction Management Association of America (CMAA), in which over 270 individuals responded, a questionnaire was enclosed that asked respondents (ranging from owners and top executives to project managers and estimators from both small and large organizations) of how they would rank themselves on ethical behavior. The conclusions from this single survey failed to definitively indicate a trend one-way or the other in ethical practices regarding construction industry; there will always be some disagreement about what is or is not ethical, furthering the argument that ethics is a grey area. As per result of survey, 84 percent say they have observed unethical behavior such as bid shopping, bid-peddling, change-order issues, over-billing, payment issues, unreliable contractors, and claims issues in the previous years; even though 85% of respondents thought that there should be an enforced industry code of ethics as these results cannot be ignored and need to be seriously considered. However, only 30% agreed that adding regulations concerning ethical behavior is a good idea (Survey, 2004), which clarifies the fact that the respondents understand the need for professional codes in their organization but implementing these codes may restrict their actions while execution of work.

Furthermore, another study conducted indicates that 70% of high school students say they have cheated to get a better grade (Carlsen, 2008). Moreover, these same students are bound to become the future professionals that are going to manage the nation's economy and construction sites. These results are indicators of crisis on ethical behaviors as well as the source of motivation to create different ethics codes and regulations like the Sarbanes-Oxley Act of 2002 that require companies to disclose the presence of code of ethics (Carlsen, 2008).

2.4 The Sarbanes Oxley Act (2002)

The Sarbanes Oxley Act of 2002 is a mandatory legislation created in consequence of the high-profile Enron and WorldCom financial scandals with the purpose of protecting shareholders and the general public from accounting errors and fraudulent practices in the enterprise. According to the Sarbanes Oxley Basics, the Act was a result of fraudulent action led by corporate executives to the eventual collapse of their organization (and other firms) leaving thousands unemployed and millions of investment dollars lost. Thus, encouragement of this Act allowed the professional organizations that oversee every sub-group related to construction operations to mandatory develop their code of ethics with the purpose to prevent cheating and other unacceptable conduct.

2.5 Code of Professional Ethics for Construction Managers & Engineers

Since 1982, the Construction Management Association of America (CMAA) and National Society of Professional Engineers (NSPE) highlights the importance of honesty and integrity in this profession and believe that all of its members must require commitment to conduct themselves and their practice of project management and construction in accordance with the standard of professional behavior maintaining the highest principals of ethical conduct.

“Hold paramount the safety, health, and welfare of the public, perform services only in areas of their competence, issue public statements only in an objective and truthful manner, act for each client as faithful agents or trustees, avoid deceptive acts, conduct themselves honorably, responsibly, ethically, and lawfully so as to enhance the honor, reputation, and usefulness of the profession” (NSPE, 2006).

Therefore, it is essential that a professional construction manager must agree to certain positive behaviors before engaging in construction business such as client service, representations of qualifications and availability, standards of practice, conflicts of interest, fair competition and compensation, release of information, integrity of the profession, public welfare and professional development. Failure to comply such positive behaviors may result in an ethical breach which can have serious complications and may result in loss of future revenue. What makes the subject of ethics for managers more challenging is that certain cultures view ethics differently, for example, in South America it is culturally acceptable to bribe officials. Similarly, in ethics training conducted by Skanska, the head of the South American Officers bribed government officials to become privy to work. Skanska, in Sweden discovered this ethical breach and turned the employees into the appropriate officials prior to any formal investigative action. The way Skanska dealt with this situation led them to being awarded the United Nations Building in New York City. Had this incident not occurred, Skanska would most likely not have been awarded this prestigious project.

Overbilling and falsification of documents to Owners by a contractor is another instance of an ethical breach. For example, Orange County Public Schools was overbilled by CPM Technologies of DeLand, worth \$2.6 million of construction charges which includes repairs and renovations at 33 campuses from 2005 to 2008 (Hobbs, 2010), that the company did not substantiate. The main cause of overbilling was the result of prolonged time of the project, which led to proper-filing and misplacement of many documents

as well as the increment of overheads of the organization. The organization should have been honest with its owner from the start, and tried to find a solution by having few consul-meetings with them.

Furthermore, an example of a Project Engineer who has often observed that a General Contractor's superintendent directs a subcontractor verbally to perform work for the on-time completion of the project, however, when it is time to agree to the change-order, he denies the fact that the executed activities were led by him, showing the lack of moral ethics in their unreasonable actions. The right way to handle this situation was to take approval of any change-order made within project from time-to-time.

Similarly, in an interview conducted with a former Project Executive of a national construction firm, witnessed an example of an unethical behavior by a designer to make the construction manager address flagrant errors and omissions through use of buyout savings; otherwise these errors would have been charged against the designers account by the owner resulting in the withdrawal of application for payment and overly scrutinized to the point of rejection. You may observe from this example that despite the consequences, the designer is only concerned with saving his neck by placing his mistakes over the shoulders of the construction manager. A strict action must be taken as a result of such unethical behavior against the designer to avoid this misconduct of ethics repeatedly in the future.

2.6 Code of Professional Ethics for Owner

It was concluded from the research that no code of ethics exist exclusively pertaining to Owners; whether to award the hard work of their entire staff with gifts or trips, which may constitute a breach of ethics or not, that solely depends on one's point of view. It is for this reason that some firms have written policies regarding gifts. For example, Skanska USA Building Inc.'s policy has a monetary limit of \$100 for gifts and \$200 for entertainment. These limits apply to both giving and receiving gifts.

It has also been observed that owners often ask general contractors or Construction Managers to carry out unethical actions such as misreporting construction costs or including items of personal gain such as work at a private residence into the cost of construction as well as to compel labors to work overtime without payment. Vee & Skitmore (as cited in John, 2009) claims that years ago it was not uncommon to send some guys over to do work at the Owners home or order materials for a project, and these items would end up at someone's house, not the jobsite. However with growth in usage of computer programmed accounting and inventory control system, the vendors paperwork is so comprehensive that the material can be cross referenced back to where it was delivered, thus, this misconduct of ethics by owners has been reduced significantly through the appropriate usage of codes (Airaksinen, 2012).

2.7 Code of Professional Ethics for the Workforce

One major issue regarding ethics of workforce is reporting their daily routine timings accurately and concisely on a timesheet, including the additional breaks taken by them on daily basis. For example, imagine a project with a prolonged duration, say two years, and the subcontractor has an average of 50 men per day and each men takes an additional half-hour of break besides the one-hour lunch time during the 8 hour service. That additional half hour raises the percentage of people's free-time from 12.5% (13050 hours) to 18.75% (19575 hours) based on 365 calendar days (equivalent to 261 working days).

So, as workforce is the one component that can either formulate or terminate a project, which is why some subcontractors have specifically invested in electronic time card devices to prevent this from occurring, or even the accidental miscoding of time to a different project. Morton Electric, a subcontractor on the Winter Park Ninth Grade Project, uses an electronic time card system to track the time worked by its employees. Each employee is given two time keys called "i-buttons" that are manufactured by Maxim, Inc. one to "clock in", and the other to "clock out."

3. Survey Analysis

The analysis of the received responses is discussed as follows.

3.1 Objective

To perceive the attitude of participated stakeholders towards ethics practiced at all levels within the construction industry.

3.2 Methodology

A survey form was distributed via e-mail to people both in the construction industry and related fields in order to understand people's views towards ethics as practiced within the construction industry. In addition to the e-mail distribution, personal interviews were conducted among few experience construction professionals to fully grasp the ethics being currently practiced within the industry. Thus, almost 35 questionnaires were distributed and 27 survey forms were returned among which 22 were considered satisfactory with adequate data for analysis with a return rate estimated to be 60% - 65%.

3.3 Outcome

When respondents were asked, "It is acceptable?" The mean responses are summarized in Table 1.

Table 1: Perception based Mean Response to Various Ethical Dilemmas

Question No.	Statement	*Mean Response
1	To use the company's suppliers in order to receive the same pricing and discounts that the company receives as long as the invoices and materials are sent directly to your home to your attention, during renovation or building of your home.	3.73
2.	For you to have a subcontractor send his carpenters or electricians etc. to your home to perform work for no charge.	1.55
3.	To transfer the losses from one project to another and avoid a project from suffering major losses and being terminated.	1.64
4.	To notify a certain bidder that his bid calculation is exceptionally low compared to the fair-cost estimation of the owner and the other bids submitted, thus, to revise their estimation cost.	4.05
5.	To use plug numbers in cost estimation to raise the costs of the other low bidders (who may not be qualified enough to perform the work) so that the influential and qualified bidder (who has better capabilities and past experience in the required work) is awarded the work.	2.41
6.	To take the owner of a project on a fishing trip providing a good opportunity for team building and discussing owner's goals and priorities for the project.	3.68
7.	To take an offer of four tickets to the Super Bowl (inclusive of accommodations). However, you would be responsible for airfare and meals.	2.95
8.	To fudge an expense report to address the out of pocket expenses that per diem does not cover.	1.77
9.	To have subcontractors or vendors take you out to eat lunch prior to award of a contract.	3.18
10.	To have a subcontractor or vendor give political contributions to a politician that you may endorse.	2.45
11.	To let a subcontractor know where they stand in regards to their estimation, prior to award of a contract.	3.18
12.	To award a contract to a firm that has taken you and your family on a getaway	1.95

	weekend to Las Vegas.	
13.	To take your wife to lunch and then expense it as a company lunch.	1.55
14.	To purchase a soda every once and a while on the company gas card, when getting fuel.	1.86
15.	To use the company gas card to refuel the boat to take the Owner's representative on a fishing trip.	2.86

* where; 1 refers to Strongly Disagree, 2 refers to Disagree, 3 refers to Neutral, 4 refers to Agree, 5 refers to Strongly Agree.

It can be observed from the results that the two lowest score obtained for survey is 1.55 giving a perception that performing work for no charge is completely not acceptable but to charge the expense cost of an outdoor lunch with family in current project account is acceptable till some limit. Thus, it can be concluded from the survey that regardless of position of the offender within the industry agreed or disagreed with what is ethical (white) and not ethical (black) values.

Similarly, the highest average score achieved was 4.05 proving that when a bidder presents a bid price for an item which is lower than the fair-estimated cost of the owner; it is the responsibility of the owner to demand the bidder to re-evaluate his bid calculations. However, the average score not being extremely close to 5.0 proves the lack of ethics as few still believe it is not their responsibility to inform them to re-evaluate their mistakes. The response to this question also aligns to what the textbook states concerning low bids, regarding the “doctrine of unilateral mistake” (Clough & Sears, 2005).

The second highest score of 3.73 dealt with use of company discounts, and preferred pricing. What make this interesting is while the scoring leans towards agreement, some respondents were neutral or disagreed; this is partially due to perception. Mostly professional project engineer believes that taking advantage of a subcontractor offering lower prices on materials may lead to a favor that subcontractor would call in later in the future. Thus, proving that ethics lies neither in neither in black nor white area but usually lies within grey area. The result of the overall survey was an average score of 2.59 proving that ethics as a whole is a very complex issue, in which the same actions can be viewed as ethical and unethical, hence the statement that ‘ethics is a grey area’ is more appropriate as no one person can agree on absolute ethics and to what level they should be considered.

4. Conclusion

When analyzing our general society in regards to ethics, the results can be very disappointing. The young people cheating in school, stealing from others but also the institutions that are trusted by all of our lives are failing us. Government, business, the media, the professionals, religion, education all fall short when it is about being ethical, trustworthy or honest; in this regard, construction industry is no different. Since the development of codes has a great contribution to improving the ethical standards of conduct within the industry, therefore, in order to reduce the incidence of unethical behaviors in industry, rigid penalties need to be applied to those caught in unethical or illegal acts. Furthermore, construction professionals and companies are very serious about their image, not only in the public’s view but with their fellow employees as well; thus they must not only see benefits in terms of cost as their major concern but work towards earning revenue in a manner that shows professional honesty and integrity as well as be ethical, fair and equitable to all parties. Therefore, the ideal first step would be to establish codes of ethics, guidelines or mission statements that outline the values of your organization and then move on to the next stage of implementing and monitoring the proper ethical actions taken on jobsite by staff members, owners, subcontractors, vendors, officials and stakeholders. Likewise, additional ethical trainings conducted in the firm needs to be integrated into company policies before such conflicts escalate in the future.

From the analysis of the responses it can be concluded that the following (refer Table 2) constitutes the top five ethical dilemmas that the construction professional perceive in today's working environment.

Table 2: Perception based Mean Response to Various Ethical Dilemmas

Question No.	Statement	*Mean Response
4	To notify a certain bidder that his bid calculation is exceptionally low compared to the fair-cost estimation of the owner and the other bids submitted, thus, to revise their estimation cost	4.05
1	To use the company's suppliers in order to receive the same pricing and discounts that the company receives as long as the invoices and materials are sent directly to your home to your attention, during renovation or building of your home.	3.73
6	To take the owner of a project on a fishing trip providing a good opportunity for team building and discussing owner's goals and priorities for the project	3.68
11	To let a subcontractor know where they stand in regards to their estimation, prior to award of a contract.	3.18
9	To have subcontractors or vendors take you out to eat lunch prior to award of a contract.	3.18
7	To take an offer of four tickets to the Super Bowl (inclusive of accommodations). However, you would be responsible for airfare and meals.	2.95

* where; 1 refers to Strongly Disagree, 2 refers to Disagree, 3 refers to Neutral, 4 refers to Agree, 5 refers to Strongly Agree.

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