

The Role of Ethics in the Construction Industry and Their Effect on Project Outcomes

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Abstract

The construction industry is based on collaboration between many stakeholders. Its influence across a wide variety of sectors makes it necessary for ethics to serve as the foundation for trust, safety, and environmental stewardship. Using a consequentialist framework to analyze ethical issues exemplifies the possible outcomes of unethical practices. The industry's failure to meet its ethical obligations, exacerbated by the gap between legal and ethical behavior, has catastrophic effects for the construction industry. To create an environment of accountability and integrity, emphasis must be placed on collaboration, creating a common code of ethics, and careful consideration of ethical dilemmas.

Introduction:

The construction industry is one of the largest and most important in the United States. Its span across many sectors, from residential, commercial, to infrastructure and institutions such as schools and hospitals. Stakeholders include owners, contractors, architects, engineers, specialty trades, and the general public. With such a large reach of influence and number of involved parties, it is crucial that construction and all of its associated activities are performed with ethics at the forefront. From within the industry, ethics serve as the foundation for trust between stakeholders, as well as a crucial failsafe for ensuring safe practices. In a broader scope, ethical practices are instrumental in the construction industry's obligation to environmental stewardship. As the consequences of unethical practices can be detrimental, it is logical to view the industry through an ethical consequentialist lens. Ethical construction is important not only to ensure fair business practices and worker safety in the short term, but also to ensure user safety in the long term and secure a positive reputation of the industry moving forward.

Ethics and their origin

To fully appreciate the role ethics play in the construction industry, it is important to have an understanding of what they are, where they came from, and why they matter. Ethics is a branch of philosophy that studies the behavior of individuals in society. It is a set of moral

principles that guide a person's conduct. Morality is the concept of distinction between right and wrong or good and bad, and is very closely related to ethics (Singer, 2011). These concepts are so significant because they dictate the approach taken for decision making and can drastically influence outcomes. These theories have made their way over to the business world and are used to ensure businesses act in the best interest of their stakeholders, including clients, employees, and the surrounding community and environment (Byars & Stanberry, 2025). This is particularly important in the Construction industry due to the significant consequences related to construction activities. The main ethical theory used in this research is consequentialism, which determines what is ethical based on the outcome or consequences. When facing ethical dilemmas, construction professionals generally view legal requirements as the most important factor to consider, mostly due to the severe consequences for breaching the law (Fan & Fox, 2009). However, simply relying on legal compliance may fall short as many harmful behaviors fall into a grey area where they are legally acceptable, but morally wrong (Pishdad-Bozorgi & Yoon, 2022).

Safety

The construction industry is one of the most dangerous industries due to the nature of the construction process (Tazmeen & Mir, 2024). The far reaching influence of the industry on society creates more potential for catastrophic consequences to health and safety. Poor practices and the prevalence of corruption result in hazardous construction methods, the use of inferior safety equipment, and overall lack of safe practices which jeopardizes the wellbeing of construction workers. These factors also lead to substandard quality control practices that impact the quality of the delivered project and put occupants at risk. These problems make it evident that the construction industry has an ethical obligation to ensure the safety of workers and the well-

being of occupants and the surrounding community (Ubesingha et al., 2024). When this obligation is neglected, catastrophic accidents can occur, such as the ceiling panel collapse in the Interstate 90 connector tunnel in Boston, Massachusetts. On July 10, 2006, 26 tons of concrete and hardware fell onto a vehicle, fatally injuring the 38-year-old passenger. Investigations revealed that the accident stemmed from the epoxy anchoring system, which was known to have poor long term load resistance by the supplier, Powers Fasteners. As a result, Powers Fasteners was indicted for involuntary manslaughter, although they were not the only ones at fault. The NTSB found that MTA failed to implement timely inspections that could have caught the issue and prevented such a catastrophic failure, and that the contractor and designer failed to design for and monitor the potential for anchor creep. This highlights the responsibility of the industry to ensure safety, as this accident was not caused by the malice of any individuals, but a systematic failure of all parties, and had catastrophic consequences (NTSB, 2007). Another instance of unethical practices creating dangerous conditions is the case of Perini Building Co. and their projects on the Las Vegas strip back in 2007 and 2008. Tasked with completing the CityCenter and Cosmopolitan projects, Perini Building Co. saw eight deaths occur on these jobsites in eighteen months. Despite Perini's insistence that they did everything they could to create safe environment, two reports by the Center for Construction Research and Training have concluded otherwise. Some of the findings included Perini sending mixed messaging about worker safety, blaming workers instead of finding root causes of these accidents, and placing scheduling concerns ahead of safety. Jobsites are congested with workers who experience falling debris, pressure from supervisors, heat exhaustion, and lack of personal protective equipment (Berzon, 2008). This case is a clear example of the effects of unethical work practices having severe impacts on the safety and wellbeing of workers. The deaths that resulted from these safety

failures could have been prevented if the construction company valued safety above schedule, and this case acts as a cautionary example for other companies to avoid the same outcome. These examples highlight the severe impact that unethical behaviors leading to safety negligence can have on both the people working on jobsites as well as the general public.

Environmental

The construction industry has one of the largest environmental impacts around the world. The actions associated with construction, modification, and demolition emit massive amounts of carbon dioxide and the operation of the built environment demands a significant amount of energy (Cortes et al., 2023). These processes are also responsible for over a third of the total waste produced and consume over half of the raw materials globally. Additionally, many of the building materials used are nonrenewable, and therefore non sustainable. These effects of construction contribute significantly to climate change, pollute and destroy land, water and air, and cause significant health problems for the surrounding community, and create a far worse world for future generations. Due to the significance of these impacts, the construction industry must make ethical decisions and find alternative renewable resources to ensure the consequences are minimal. There has been a determined effort in the industry to prioritize sustainability in the construction process. More owners are willing to pay the extra cost for sustainable practices in order to create green buildings, and the development of LEED, or Leadership in Energy and Environmental Design, gave contractors incentives for sustainable practices. These efforts focus on efficient usage of energy and materials, delivery emissions, and building with the environment in mind. This movement towards sustainability is essential to reducing the effect the industry has on the environment to ensure a sustainable future. A recent example of unethical actions causing environmental harm is the construction of the Route 6/10 Interchange in

Providence, Rhode Island. Barletta, a Massachusetts based construction company tasked with overseeing the project, was found to be dumping contaminated fill from other jobs on the site of the Route 6/10 Interchange. In total, approximately 4,500 tons of stone and soil from sites with known contamination, including arsenic and polycyclic aromatic hydrocarbons, were dumped in Providence neighborhoods, instead of being properly treated and disposed of. When asked for environmental certificates for the transported fill, Barletta provided state officials with testing reports from a different site. This blatant disregard for Rhode Island's environmental and public health laws resulted in criminal and civil charges brought against Barletta, costing the company tens of millions in fines and legal fees (Carini, 2025). Such actions not only damage the environment, but also public's trust of the industry and the health and wellbeing of the local community and local environment.

Project Delivery Methods

Traditionally, the construction industry has relied on project delivery methods with a linear process, such as design-bid-build, which separates the design and construction phases. This often results in general contractor selection based on the lowest responsive bid (Fong et al., 2014; Nichols & Krick, 2023). This separation and price competition creates an adversarial relationship and lack of transparency between stakeholders, leading to a lack of trust and increased conflict (Mehany et al., 2018). The environment created by the low-bid preference promotes unethical behavior such as bid shopping and bid peddling, which undermine the integrity of the competition and compromise trust between general contractors, subcontractors, and owners (Pishdad-Bozorgi & Yoon, 2022). This adversarial culture also creates incentives for the lowest bidder to pursue change orders over design deficiencies in order to recover costs and protect profits, leading to a worse working relationship and affecting the overall project quality

(Fong et al., 2014). In response to these issues caused by traditional project delivery methods, the development of alternative methods such as integrated project delivery, design build, and CM at risk has created a more collaborative environment through early contractor involvement and shared risk that increases trust among the parties (Nichols & Krick, 2023). This integrated approach leads to better communication, budgetary control, less change orders, and a decreased chance of legal disputes, improving the overall project outcome (Mehany et al., 2018; Nichols & Krick, 2023). Gilbane Building Co. is an excellent example of the benefits offered by these alternative methods. They show how a company can provide flexibility through a more integrated approach to better meet the needs of clients. By actively gathering feedback throughout the different phases of the project, relationships can be strengthened while practices are improved (Angelo, 2007). This model serves as evidence that investing in the relationships between client and contractor benefits all stakeholders and leads to successful projects for clients and growth and security for contractors.

Bidding Practices

One area that highlights the gap between ethical and legal behavior is bidding practices. Particularly the practices of bid shopping and bid peddling, as both are unethical and frowned upon in the industry, yet entirely legal. These practices dismantle trust between stakeholders, and create cost pressure that forces subcontractors to cut corners. This leads to lower quality, increased disputes, schedule delays, cost overruns, and decreased site. Additionally, the need to compensate for this lost profit margin often motivates contractors and subcontractors to aggressively seek change orders. Change orders are modifications to the original scope, duration, or cost of a project, and can be used as an unethical and illegal strategy for inflating profits if issues are identified early in the process but not reported until a change order is realized by the

owner. This fraudulent behavior further damages trust and exemplifies the adversarial nature of lowest bid procurement (Pishdad-Bozorgi & Yoon, 2022). This distinction between legal and ethical actions highlights the necessity for companies to be held to a higher standard than the law is capable of and have real consequences for all stakeholders.

Code of Ethics

In an industry with so many stakeholders, it is important for everyone involved to be aware of the expectations for appropriate actions. The most effective way to achieve this is with a centralized code of ethics that provides ground rules for acceptable behavior and is rigorously enforced among all parties. This code would be a tool for addressing ethical concerns and in turn, creates a culture of trust and safety within the industry. In order for this to be effective, the code of ethics must address a wide range of ethical dilemmas and promote communication when ethical concerns arise (Ubesingha et al., 2024). Several industry-related associations such as the American Institute of Constructors, the Construction Management Association of America, the American Society of Civil Engineers, and the American Institute of Architects have their own codes of ethics. Additionally, various chapters of the Associated General Contractors of America employ a code of ethics, such as AGC of Washington and AGC of Wisconsin, although these act as separate entities and are not unified under AGC. These codes address various ethical challenges and guide the conduct of members, however they achieve this goal in different ways and miss certain aspects that could be important to cover. Bearing this in mind, it would be beneficial to have one standard code of ethics for the AEC industry that contains a more comprehensive variety of ethical concerns and can be applied to a wider range of stakeholders. One example of the necessity for a code of ethics is the case of CannonDesign. The design firm's involvement with a large VA hospital project in California was found to have

been won through insider information. In response, the company exited from all project involvements and invested extensively in improving the ethical environment of the firm. By expanding their code of conduct, appointing compliance officers in every office, and delivering extensive ethical training to employees, CannonDesign has worked to prevent similar transgressions moving forward (Rubin, 2016). While this serves as a model for creating ethical business practices, it also points out the consequences of the absence of a centralized code of ethics. When some parties are not informed on the ethical obligations of their roles, there are real world consequences, all of which could be avoided if ethical practices were emphasized more heavily in the AEC industry.

Conclusion

The significant size and influence of the AEC industry across residential, commercial, heavy civil, and environmental sectors creates a necessity for ethics to remain at the forefront of all associated activities. As demonstrated through the consequentialist framework, outcomes of unethical practices can be catastrophic, affecting workers, occupants, communities, and the environment. Ethical dilemmas arise in many areas of the industry, including the safety and wellbeing of all stakeholders, environmental concerns, working relationships, and bidding practices. Through ethical business conduct, increased transparency and collaboration, creating a unified code of ethics, and being held to a higher standard than the law dictates, the construction industry can establish a culture of trust and safety that benefits all stakeholders, and secure the integrity and positive future for the AEC industry.

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