

Ethics behind Corporate Deviance

Jordan Davis

Auburn University

Abstract

The decisions of corporate executives that lead to catastrophic accidents offer valuable insight into the effects of market forces on risk management and decision-making. The idea of “normalization of deviance” in these cases presents a model for how decision patterns develop over time into disaster situations, but does not fully explain the reason that deviance is accepted, or phrased another way, ethically justified by the decision makers. I present an argument that the ethical framework behind these decisions is most likely the combination of indirect utilitarian market ethics influenced heavily by cost benefit analysis. I present this argument through an ethical analysis of the Imperial Sugar Refinery explosion of 2007 and subsequent investigation. I conclude with the suggestion that consequences of this ethical approach applied to risk management and decision making exposes a weakness in the approach itself and that the approach is unethical in most risk management situations.

Introduction

Risk management in potentially hazardous situations at first seems to be a simple responsibility for companies to prioritize; risks can be calculated, addressed, and prevented in practically every situation, given the right resources and enough creativity. This simple approach, however, does not seem to stand when considering real and highly risk-prone cases. Some phenomenon occurs in corporate decision making, where simple preventative measures are overlooked, risk management is not prioritized, and in extreme cases, the results of risk-accepting decision-making leads—quite literally—to explosive, painful lessons. Abundant literature on these lessons offers everything from explaining why shuttles exploded and oil well blowouts occurred, to how a company can assign a dollar amount to a human's life (Cullen, Maakestad, & Cavender, 1987; Dombrowski, 2000; Skogdalen & Vinnem, 2012; Vaughn, 1996). As with any case involving complex decisions, these types of failed risk management situations can be analyzed ethically. And initially, it may be easy to condemn these failures as unethical simply because of the loss of human life, but perhaps a more nuanced analysis can lead to a better understanding of the ethical situation and more knowledgeable decision making in the future. After all, shouldn't that be the goal of an ethical analysis? The unique advantage of an ethical analysis is that it allows for a discussion of not only factual statements, but also of normative statements, which establish the way individuals ought to act.

Though the aforementioned disasters may seem to be edge cases, in reality, tragedy can happen anywhere, given the right conditions. Thus, I opted to draw information not from a government funded, public space program, or a multinational oil and petroleum giant, but instead from an ordinary company producing a simple product: sugar. The Imperial Sugar Company, operating in the United States for well over one hundred years, manufactures and sells refined sugar. This company also experienced an explosive disaster of its own in 2007. I hope to demonstrate through this company's case that the

phenomenon of deviance in the corporate world does not occur only on the cutting edge or largest, most complex organizations. By deviance, I am referring to the sociological concept of the “normalization of deviance” coined by Diane Vaughn, which briefly defined means the compromise of standards to maintain operational status (Vaughn, *The Challenger Launch Decision*, 1996). The Imperial Sugar Company case offers all people engaged in the corporate world –including at “public” entities like NASA – the ability to examine an ethical issue that could otherwise be easily dismissed, if only because it is easy to condemn *prima facie* a company experiencing a public, embarrassing, and often violent failure, without asking why decision makers acted in a way that in hindsight is so clearly doomed to disaster. This study will review the case of the Imperial Sugar Company refinery explosion, using relevant literature on sociological and ethical theories to identify the ethical framework behind the decisions made at the refinery, and will attempt to draw a normalized conclusion about the ethics behind corporate deviance.

Case Study: Imperial Sugar Refinery Explosion

On the evening of February 7, 2008, John Sheptor, the newly promoted CEO of Imperial Sugar Company, was touring the company’s sugar refinery facility in Port Wentworth, Georgia with three employees. As the group headed to the south packing building, an explosive pressure wave slammed them back, debris flying through the packing building doorway. A large fireball leapt from the refinery, which that evening housed 101 employees and contractors (U.S. Chemical Safety and Hazard Investigation Board, Transcript, 2009). The combustible dust explosion triggered secondary explosions throughout the facility, fracturing concrete and shattering equipment. Workers had no warning as fire cascaded throughout the packing buildings. The fire suppression system had failed due to ruptured water pipes from the force of the explosions. Secondary ignitions traveled through enclosed sugar conveyors, starting fires in the refinery and bulk sugar building, far from the initial fireball. Explosions continued for

continued for over 15 minutes as loose sugar and sugar dust fed the combustion (U.S. Chemical Safety and Hazard Investigation Board, Sugar Dust Explosion, 2009). The fire claimed the lives of 14 employees, many passing from burn wounds hours after the event, with the last dying 6 months later. 39 others suffered injuries, including 23 burn victims. Of these burn victims, 15 suffered serious and life-threatening injuries, requiring treatment at a burn center over 100 miles away from Port Wentworth (U.S. Chemical Safety and Hazard Investigation Board, Transcript, 2009). Emergency responders arrived at the Imperial Sugar Refinery in less than 10 minutes and immediately engaged in search and rescue operations, followed by firefighting efforts. The main fires were extinguished the next day, but silo fires were not extinguished until February 15. Investigators from the Occupational Safety and Health Administration (OSHA) were present at the refinery the day after the incident, February 8, 2008, and would continue on-site investigations for 4 months to piece together the cause of the explosion (U.S. Chemical Safety and Hazard Investigation Board, Transcript, 2009).

The Imperial Sugar Company Refinery explosion investigation was sent to the U.S. Chemical Safety and Hazard Investigation Board (CSB), which spent 19 months on the task. The board, together with OSHA, would conduct approximately 140 interviews with workers, contractors, managers, supervisors, and company executives. Investigators collected photo evidence of the facility throughout the disassembly and review process, as well as photos of conditions in the refinery before the event (U.S. Chemical Safety and Hazard Investigation Board, Transcript, 2009). The investigation generated hundreds of pages of transcripts, testimonies, statements, and evidentiary documents used by the CSB to write the investigation report titled *Sugar Dust Explosion and Fire*. The final report detailed the events leading up to the explosion, noting both the technical aspects of the event, and the management failures that allowed for such a severe accident to occur.

This paper will focus on the evidence generated from the investigation of the Imperial Sugar Company refinery explosion, pulling from the company's historical record, equipment inspection reports, transcripts of executive testimonies, chemical specifications, news articles about the investigation, a company press release, email records, and a Congressional hearing to connect the company management's past decisions over a century of operations to the 2007 incident. In order to understand why certain decisions were made in a case, and how the decisions could be ethically justified by the actors in the case, the history of decisions—or, chain of events—must be clearly presented. This amalgamation of documents contains the necessary information to piece together the pattern of decision making by managers and executives, allowing for an ethical analysis of the case at hand.

Imperial Sugar Company was incorporated in 1924, and throughout the years had risen to become one of the largest granulated sugar refiners in the United States (U.S. Chemical Safety and Hazard Investigation Board, Transcript, 2009). With over a hundred years of experience in the industry, it would not be an unreasonable leap to expect Imperial Sugar management and executives to know the hazards of sugar dust and to have hazard management practices in place. Yet, the investigation revealed no such understanding among management and executives, as spilled sugar and sugar dust were constant problems (U.S. Chemical Safety and Hazard Investigation Board, Transcript, 2009). The CSB investigation examined documents from the 1960s identifying the potential explosion hazard at the Port Wentworth refinery, and saw photos from 1970 through 2007 that showed accumulation of spilled sugar and sugar dust throughout the refinery (U.S. Chemical Safety and Hazard Investigation Board, Sugar Dust Explosion, 2009). Starting in 2006, outside consultants and contractors reported to Imperial Sugar management at the Port Wentworth facility of faulty equipment that led to sugar spillage and sugar dust buildup (MacAljon Engineering, LLC, 2008; Myers, 2007; Tillman, 2006). The refinery experienced small fires, worker injuries due to spilled sugar accumulation, and two weeks prior to the catastrophe, a dust

collector unit experienced a blowout, where the machine failed and blew out a panel to prevent a fire or explosion from occurring (U.S. Chemical Safety and Hazard Investigation Board, Sugar Dust Explosion, 2009). From a safety management perspective, though the facility records indicated that the hazards of combustible sugar dust were known, employees were not adequately trained to understand the risks, nor was an effective housekeeping program in place to prevent dangerous sugar dust accumulation. Training materials lacked any mention of combustible dust hazards, and in the investigation of worker safety materials and housekeeping manuals, the CSB investigators found no mention of combustible dust (U.S. Chemical Safety and Hazard Investigation Board, Sugar Dust Explosion, 2009).

Curiously, in CSB investigative documents, there seems to be a discrepancy in levels of knowledge among the executives and refinery management about the potentially explosive risks present. In one of the initial investigation proceedings, CEO John Sheptor testified that he did not know that sugar dust could be explosive (Transcript of John Sheptor, 2008). Yet, company records of the material safety data sheet (MSDS) for granulated sugar and common knowledge in the industry, “which dates back to the early ‘20s,” indicate that executives and management should have been at least aware of the explosive potential of sugar dust (Imperial Sugar Company, Sucrose; U.S. Chemical Safety and Hazard Investigation Board, Transcript, 2009). In fact, the plant safety director at Port Wentworth did know about the dangerous conditions in the refinery, stating in an email to colleagues from Jan. 20, 2008 that “[w]e have a serious explosion risk” (Peterson, 2014). But, in a series of emails between John Sheptor and Graham H. Graham, the Vice President of Operations at Imperial Sugar, poor housekeeping is a minor issue to be addressed, and dust explosiveness is not even a concern between these two executives as they discuss the changes to be made at the Port Wentworth facility. Housekeeping efforts at the refinery, Graham reported 12 days before the explosion, “have made enormous improvement” (Graham & Sheptor, Email communication. 2007-08).

This ignorance in the executive department is more curious still, as the CSB investigation revealed that a 1998 explosion had occurred at an Imperial Sugar Company sugar mill, involving combustible sugar dust. And most curiously, three weeks after the Port Wentworth explosion, OSHA inspection of Imperial Sugar's Gramercy, Louisiana refinery revealed hazardous dust conditions that could lead to explosions, prompting the company to suspend operations until the conditions were resolved (U.S. Chemical Safety and Hazard Investigation Board, Transcript, 2009). How could executives and management allow similar conditions to exist after such a monumental tragedy? The investigative board also expressed confusion over this finding.

Normalization of Deviance

The Challenger disaster was one of the most public displays of failure to date, shocking the United States as citizens watched the manned space shuttle disintegrate during launch. Literature on the subject of the launch failure abounds, but perhaps one of the most interesting analyses comes from Diane Vaughn, a sociological researcher interested in the decision to launch the spacecraft given the level of risk of the operation, calculations showing failure would occur, and the recommendation against launching given by engineers. Her research led her to develop the notion of "normalization of deviance," the process where deviations from acceptable or safe conditions are accepted as normal in order to continue operations. In her analysis, Vaughn pieced together the history of decision making at NASA, concluding that

[I]n the years preceding the Challenger launch, engineers and managers together developed a definition of the situation that allowed them to carry on as if nothing was wrong when they continually faced evidence that something was wrong. This is the problem of the normalization

of deviance... My analysis of their first negotiation of risk in the history of decision-making showed this sequence of events:

1. Signals of potential danger
2. Official act acknowledging escalated risk
3. Review of evidence
4. Official act indicating the normalization of deviance: accepting risk
5. Shuttle launch (The Challenger Launch Decision, 1996, p. 85-86, 89).

In other words, NASA employees were redefining the standard for acceptable conditions. Vaughn argues that both the redefinition and the method of response (normalization) became integrated within the culture of the organization, altering the worldview of the workgroup (The Challenger Launch Decision, 1996, p. 89). Expanding on her analysis in a paper on rational choice and social control of organizations, Vaughn makes note that the culture at NASA had developed a social context in which having problems was normal and expected. Damage to the rocket system did not occur catastrophically in one event, but instead occurred incrementally, preventing engineers from realizing the severity of each incident – since, after all, the system still functioned well enough (Vaughn, Rational Choice, 1998, p. 15).

Ethical Theories: Indirect Utilitarianism, Egoism, and Cost Benefit

Analysis

While Vaughn's normalization of deviance may help to answer how conditions were allowed to deteriorate despite the numerous warning signals at Imperial Sugar's refinery, it does not explain *why* the executives and management made the decisions to normalize deviant standards leading up to the disaster – and even weeks after the explosion at the Gramercy facility. To answer this question, a consideration of ethical theory may give insight into the reasoning behind the decision makers' actions.

In the Imperial Sugar case, one of the strongest ethical theories to frame the case and decision-making processes comes from the field of normative economics. Normative economics offer economic analyses that embody ethical judgments about the right or best course of action. Normative economic approaches form the basis for understanding the underlying assumptions and unspoken rules of market economics, or the flow of goods, services, and capital (Kernohan, 2012, pp. 217-219). To clarify, markets operate socially, and are organized according to the culture that takes part in the marketplace. Beneath the market economy are certainly legal systems, but there are also unspoken norms that guide the participants in the market system. These norms can be thought of as an ethical lens, used to come to a better understanding of how the market functions.

The most useful ethical lens for this case study is the indirect utilitarian justification of the market economy. This ethical lens argues that the free-market system will optimize aggregate preference satisfaction for everyone in the market, provided that all in the system seek out their own self-interest (Kernohan, 2012, p. 224). In essence, actors in an indirect utilitarian system justify acting in self-interest, or in an ethical egoist manner, on the grounds that the resulting consequences of such actions results in maximized preference satisfaction. An ethical egoist position “holds that we ought to pursue our own best interest even if we are sometimes motivated to help others” (Geirsson & Holmgren, 2010, p. 63). Initially, indirect utilitarianism sounds contradictory. How could a person acting in total self-interest bring about the maximum *aggregate* preference satisfaction for all actors in a market? This question was answered by Adam Smith in *The Wealth of Nations* through his concept of the invisible hand; market forces lead individuals to make decisions that, when added together, balance to maximize total economic welfare (Kernohan, 2012, p. 224). Even if an ethical egoist were to act in an altruistic, or selfless, manner, the actor would be acting only because that action is the best strategy for long-term self-interest. The egoist is only motivated by the final payoff (Geirsson & Holmgren, 2010, p. 63).

The second component of this ethical analysis, and the link between indirect utilitarianism, egoism, and the normalization of deviance, is the technique of a cost-benefit analysis. Paraphrasing Kernohan, and redefining his approach to meet a more general fit, a cost-benefit analysis is a technique where a person measure the costs and benefits of different decisions according to the willingness to pay. The technique measures costs by how much individuals are willing to accept as compensation for the negative consequences of a decision, and benefits by the willingness of individuals to pay for the consequences of the decision (Kernohan, 2012, pp. 264-265). Now this technique is quite interesting when considering its use in different ethical frameworks. When an ethical egoist thinks through a cost-benefit analysis, even in a simple case, the language of the definition changes. Our egoist thinks in terms of how much she is willing to pay for the consequences of her decisions, and how much she is willing to accept as compensation for the negative consequences of her decisions; the effects of her decisions on others now factor in as variables, not as *participants* in the same formula.

In a broader sense, the decisions made by individual egoists in the larger indirect utilitarian market system will tend towards a balance, but when negative consequences are outweighed by positive benefits, the total aggregate benefits can be increased at the expense of individuals with less privilege or power. Recalling the idea that an egoist always seeks to maximize self-interest, if that can be achieved at the expense of others, and the benefits outweigh the costs, then egoists will always move towards that decision (Geirsson & Holmgren, 2010, p. 63). However, what if the egoist miscalculates? Simply by the nature of probability, certain risks will always exist as a chance. If the ethical egoist cannot accurately gauge risk, the consequences of her actions could end up costing far more than her initial cost-benefit analysis revealed. Now this is not to say that, as described in the Ford Pinto case, that individuals acting under this model are actually conducting a sort of formal calculus, assigning value units to every

potential outcome in a situation. This model presents the idea that individuals thinking in terms of economic costs and benefits, and especially the personal effect a decision made in a business setting will have, will consider chiefly the costs and benefits of an action in relation to the self, and all other individuals are secondary to that calculation.

Discussion: Connecting Theory to Practice

With the relationship established between indirect utilitarianism, ethical egoism, and cost-benefit analysis, the critical discussion remains to explore if the practices at Port Wentworth are connected with the idea of normalization of deviance and the ethical theories discussed in the previous section. To begin, the Port Wentworth refinery undoubtedly experienced a normalization of deviance. Drawing from the investigation public hearing transcript, we see the following pattern over time developing: On pages 19-20, internal correspondence from the 1960s identified explosion hazards in Port Wentworth. On page 20, investigators noted that an Imperial Sugar mill experienced an explosion event in Sugar Land, Texas. On page 19, the Imperial Sugar MSDS for granulated sugar recognized the explosive potential of sugar dust accumulations. On page 21, photographs from different times in 2006 and 2007 showed that dust accumulation was a constant problem in the plant (U.S. Chemical Safety and Hazard Investigation Board, Transcript, 2009). The trend over time for Imperial Sugar was one that clearly deviated from safe, acceptable workplace conditions.

Two key insights follow these discoveries, first that "...in more than a hundred operating years at this facility... there was never a catastrophic dust explosion that resulted in fatalities or major injuries or major facility damage" despite a clear record of dust accumulation, and fire reports and worker injury reports detailing the constant issues arising from the poor state of the plant (U.S. Chemical Safety and Hazard Investigation Board, Transcript, 2009). Second, an unnamed company executive remarked, "I am

amazed at the extent of destruction. I understood the hazard, understood the risk, seen dust collect to an extent and had flashes and then before seen explosion suppression systems that worked, but never imagined the propagation that occurred at Port Wentworth” (U.S. Chemical Safety and Hazard Investigation Board, Transcript, 2009). Yet, even understanding the risk, the executive staff of Imperial Sugar Company did not make major changes in their hazard management, training, or housekeeping to fix the problems in time to prevent a catastrophe. Recalling Vaughn’s model for the process of normalization of deviance, and through inference, we can imagine that the lack of severe problems arising from sugar spillage and sugar dust accumulation lured management and executive staff into a false sense of security. The process of normalization at Port Wentworth (and other Imperial Sugar facilities) could follow an adjusted model, where

1. signs of potential explosion hazards are recognized (Peterson, 2014);
2. executives or managers acknowledge heightened risk (Statement of Imperial Sugar Company for Hearing on Combustible Dust, 2008);
3. executives or management review the evidence (Graham & Sheptor, Email communication. 2007-08);
4. official action indicates the normalization of deviance: accepting risk (Graham & Sheptor, Email communication. 2007-08);
5. Continuation of operations with minimal changes, if any (U.S. Chemical Safety and Hazard Investigation Board, Sugar Dust Explosion, 2009).

The final piece of evidence signaling a truly normalized condition of deviance, built over decades of operational compromises, was discovered three weeks after the Port Wentworth explosion. At Imperial Sugar’s Gramercy, Louisiana facility, investigators found the same “imminent dust hazards” present during the Port Wentworth catastrophe (U.S. Chemical Safety and Hazard Investigation Board,

Transcript, 2009). Imperial Sugar leadership were not learning lessons from any problems occurring inside company facilities, preferring to push for profit year over year instead (Muller, 2013).

I want to draw attention back to the third step in Imperial Sugar's normalization of deviance model. It is most likely during this step that the cost-benefit analysis takes place, linking the ethical theory to the sociological phenomenon. Those with power in the corporate structure are presented with choices – in Imperial Sugar's case, to rectify sugar spillage and prevent potential hazardous situations from developing, or to continue operations as nothing serious had ever occurred in one hundred years of operations – and the costs and benefits are weighed. The following is a possibility not covered in the research of this paper, but inference from the documents from the refinery explosion investigation lead me to argue that executives and managers were concerned chiefly with their own self-interests.

Consider the obviously falsified testimony of John Sheptor; his testimony under oath about his ignorance of the explosive nature of sugar dust shielded him from taking personal blame in his company's failures. Ultimately, every small failure in the company was accepted after a person in a leadership role reviewed the evidence against his or her personal cost-benefit analysis, and until the refinery was obliterated, and lives were lost, the costs of providing safe working conditions for workers were never worth the sacrifice in the benefits of maintaining status quo in Port Wentworth.

Conclusion

With regards to risk management and control of hazardous materials, companies face challenges balancing the costs associated with workplace safety with the benefits associated with actual production of goods or delivery of services. Over time, less diligent companies, and decision makers within those companies, can let safety procedures slip, especially when no major accidents occur during operations. The costs of normalizing deviant behavior seems to be quite low, and the benefits appear to outweigh

the heightened risks. After all, with a reduced focus on housekeeping, Port Wentworth employees could spend more time actually producing refined sugar, which generated profits for the company, and benefitted everyone on the corporate paycheck. Yet, the great takeaway from the Imperial Sugar refinery explosion is that even within an indirect utilitarian market, the safety and wellbeing of employees outweighs any short-term benefits generated from normalized corporate deviancy. I would argue that normalization of deviancy in workplace safety is actually a market failure, and undermines the maximization process critical to the indirect utilitarian theory of market economies. Understanding the potential loss of life, resources, and profits that could result from major workplace accidents, it is not in the best interest of any person in the corporate world to give in to the pressures of normalizing deviancy, and actually is an unethical action, even within an ethical egoist frame of reference. Such action creates far too much uncertainty and potential for loss of future benefit, that an ethical egoist could be considered to work against her own self-interest. If this argument holds to be true and valid, then members of any profession in the corporate world would do well to avoid the sort of normalizing processes that can lead to deviancy in any manner of safety or regulatory areas.

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