THE FORD PINTO RECALL OF 1978

GrC 320-03, Fall 2016
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The year was 1968, and plans for a beautiful new car were underway at Ford Motors. It was affordable at just under $2,000, it delivered over a whopping 25 mpg, it weighed less than 2,000 pounds, and it was to be ready to market in just 25 months. But just one little problem—there was a probability that a small collision would send this car up in flames. Introducing the Ford Pinto, a product of flawed priorities and faulty management.

In the late 1960’s foreign car companies were dominating the market for smaller cars and Ford’s then executive VP, Lee Iacocca, wanted to do something revolutionary. The Ford Pinto’s lightweight and cost-friendly selling points looked great on paper and the concept was given the go-ahead. It wasn’t until months into development that Ford realized the Pinto model might not have the safest design. During the crash-testing phase of development, a striking amount of runs came to a concerning conclusion: low speed collisions would end, more often than not, with the car bursting into flames. Despite this, the Pinto project continued and proved to have what could be considered Class 1 defects, or defects causing severe injury catastrophic economic loss. It would take at least over two-dozen deaths (if not more) before the American car company issued a recall of 1.5 million vehicles.

The recall did not do much to salvage Ford’s reputation, though, as they already had millions of dollars of lawsuits decided against them, which was one of the reasons that Ford issued the recall in the first place. One of these lawsuits was State of Indiana v. Ford Motor Co.. The State of Indiana v. Ford Motor Co. was the first ever lawsuit in which an American corporation was prosecuted or indicted on charges of criminal homicide. While Ford was acquitted of the charges, the broken brand promise was enough for consumers to reject the Ford Pinto. Production of the model stopped just five months after the trial.
Before going into how Ford management would let a car with so many known flaws make it to market it is important to first discuss the mechanics behind the flaws. It was reported that at the time the Pinto was being produced cars were supposed to withstand up to a 20 mph hit without hurting the fuel tank, and by 1973 cars were supposed to withstand a 30 mph hit. The Pinto was not even in conformance with the 20 mph requirement. The first problem with the Pinto design was that it placed the fuel tank directly between the rear bumper and rear axel, and due to the location bolts from nearby parts easily punctured the tank causing fuel leakage. But not only that, upon impact from a collision the tank’s filler neck would often pull away from the sheet metal tank, resulting in fuel leakage as well. In once instance of eleven test collisions, eight collisions resulted in the gas tank rupturing, which often led to the car bursting into flames. For the three of the eleven collisions that did not result in a ruptured fuel tank, engineers had actually implemented further precautions to protect against the rupturing issue, therefore helping them get to the root cause of the issue. Ford engineers were in complete But why were their solutions not added to the car model before hitting the market?

When looking at Ford’s management from the point of view of Deming’s System of Profound Knowledge, we can think critically about the psychology of the business. The decision to move along with the production of the Pinto despite known safety hazards was ultimately one from a business standpoint, completely throwing ethics aside. An article from the Harvard Business Review by Max Bazerman and Ann Tenbrunsel pointed out how the Ford management took “an approach heralded as rational in most business school curricula, they conducted a formal cost-benefit analysis—putting dollar amounts on a redesign, potential lawsuits, and even lives—and determined that it would be cheaper to pay off lawsuits than to make the repair. That methodical process colored how they viewed and made their choice. The moral dimension was not part of the equation.” (Bazerman, Tenbrunsel 2014). Ford's business decision was reached after
concluding that price of non-conformance, to put it in Crosby’s terms, or the money they would lose from their defective cars and approximately 180 deaths, would be as follows: “$200,000 per death, $67,000 per injury, and $700 per vehicle equating to the total “societal benefit” is $49.5 million” (Leggett, 1999). This $49.5 million price of non-conformance was far less than the $137 million price of conformance Ford would spend on retooling and implementing the safer Pinto design.

Another tool to understand where Ford went wrong with the Pinto could be by dissecting it with Deming’s fourteen points. Deming’s fourth point states “end business practices driven by price alone”. It is painfully clear, and often stated, that the only reason that Ford did not implement one of the many fixes on the fuel tank was due to the cost to the company. Ford showed negligence by knowing the solution to a problem, yet ignoring that solution because it would cost money to retool the machines and fix the cars. This was not the only one of Deming’s points that Ford failed to follow, though. Deming’s eleventh point says to “eliminate numerical quotas and management by objective (MBO)”. The very selling points for the Pinto are numerical goals- by being fixated on the idea that the car would be under 2,000 pounds, under $2,000, and to the market in just over two years, Ford didn’t provide it self with much breathing room to make changes. In the GrC 320 coursepack it says that by focusing on the numerical goals and quotas, the brand is placing “an obstacle to improving quality and productivity” (Rivera, 2015). If Ford had been willing to sacrifice these lofty goals, perhaps they could have put that effort towards making the car better from the beginning, with realistic price points and physical attributes. When the price to fix each car was quoted at around $11.00 per car, the consumer probably wouldn’t have even minded this change.

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<tr>
<th>Benefits</th>
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<tr>
<td>Savings: 180 burn deaths, 180 serious burn injuries, 2,100 burned vehicles</td>
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<tr>
<td>Unit cost: $200,000 per death, $67,000 per injury, $700 per vehicle</td>
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<tr>
<td>Total benefit: (180 x $200,000) + (180 x $67,000) + (2,100 x $700) = $49.5 million</td>
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<th>Costs</th>
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<td>Sales: 1.5 million cars, 3.5 million light trucks</td>
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<tr>
<td>Unit cost: $11 per car, $11 per truck</td>
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<tr>
<td>Total cost: (1.5 x $11) + (3.5 x $11) = $137.5 million</td>
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Figure 2 Credit: Shaw, Berry, 2013
If Ford had focused on designing the car correctly in the first place, they would have been applying Crosby’s philosophy of “we will do what we say we will do and we will do things right the first time” (Crosby). By operating under this culture of quality, Ford could have avoided the benchmarking that caused the whole issue in the first place. Benchmarking is when the company compares itself to other companies, which in this case was Ford comparing their success with the booming success of the foreign car market. Deming had said, “all quality issues can be directly attributed to poor management”, and the Pinto case is an obvious example of that. Management did not foster that culture of quality that would make the rest of the company want to build the perfect car the first time. Instead, they justified their choice to ignore the fuel tank concerns because the monetary damage/fixes after the fact would be less expensive than fixing the problem as soon as they found it.

Even looking past the gravity of the Pinto’s flaws, by knowingly allowing non-conformance vehicles to hit the market Ford was not creating a culture of quality. Phillip Crosby had said “those companies that have lost their way usually do it by becoming separated from their customer” (Crosby). In this case it is accurate; Ford had forgotten that the point of the business is to satisfy the customer, and by putting the money and business above all else it was separating itself from the customer. The VOC, or voice of the customer, when purchasing a car often includes the desire for safety and reliability. When building the Pinto, Ford was ignoring the VOC. Sure, people wanted a inexpensive car that still performed well. But by purposefully disguising the fact that other safety features were sacrificed to achieve the low price Ford was letting down their consumers.

Crosby’s maturity grid can also be used to analyze management’s choice to move ahead with the Pinto’s production. By choosing to continue with the Pinto, management
was showing signs of Stage 1 Maturity: Uncertainty. Iacocca, who played a big roll in pressuring the Pinto to move forward, could easily be labeled as “not wanting to know” that there is a problem. It has been speculated that he personally refused to acknowledge the safety concerns, and people were dissuaded from bringing it up. In the coursepack, it says “trends and tools I managing for quality may be superficially implemented without knowledge or long-term application, and are quickly abandoned when perceived as being ineffective in solving quality issues” (Rivera, 2015). This is reminiscent of how the engineers at Ford found a way to make the fuel tanks safer, yet because of the cost to implement the solutions they were abandoned.

In a 2011 article from Popular Mechanics, Ben Wojdyla discusses the actual severity of the Pinto disaster: “Reports range from 27 to 180 deaths as a result of rear-impact-related fuel tank fires in the Pinto, but given the volume of more than 2.2 million vehicles sold, the death rate was not substantially different from that of vehicles by Ford's competitors. The far more damaging result for Ford was the PR disaster.” (Wojdyla, 2011). When looking at it in perspective, it is interesting that the Pinto was not that much more “unsafe” than other cars as shown by the proportion of deaths to the number of cars sold. It was Ford’s knowledge of the problem, ability to fix it, and how they ignored the moral responsibility to do so that hurt them. If we were to only look at the number of cars that actually combusted, out of the 2.2 million sold, the Ford Pinto was running somewhere between a 5 and 5.76 sigma. Although all companies should strive for perfection and have a goal at running at 6 sigma (defined by having only 3.4 defects per million opportunities), the Pinto sigma rating wasn’t terrible. But that is also given that not many of those 2.2 million Pintos were involved in car crashes. If we were to consider that every single Pinto was created with a potentially fatal flaw, they would be operating at a 0 sigma rating.

Some members of Ford’s own management team look back on the situation with regret, including Dennis A. Giola who was field recall coordinator at Ford as the Pinto issues began to present themselves. Giola said “I was in a position to do something about a serious problem… and didn’t. That simple observation gives me pause…and also makes me think about the many difficulties people face in trying to be ethical decision makers in organizations.” (Weiss, 1998). Giola also stated that he was given the
opportunity not once, but twice, to issue a recall but voted not to. It wasn’t until the car sparked national attention that the model was recalled.

In conclusion, when using theories and lessons from the masters of quality management we can see exactly where Ford went wrong with the production of the Pinto. We are also able to see what motivated such a powerful brand to push forward with the project, despite the knowledge that they were not producing the highest quality vehicle. As Deming said, it all comes down to poor management. The push to get the Pinto to the market was from the top-down, and by instilling a higher culture of quality within, and “getting it done right the first time”, Ford they could have saved lives and avoided the PR disaster that followed.
Works Cited


