



Introduction: The Case



The Ford Pinto situation was a seminal moment in history that changed the business world forever. According to Fortune Magazine it “helped create the business world as it is today.” As you read the case, consider the ethical theories and decision making biases you’ve learned about. How do they apply to Ford and the decision makers who ultimately allowed the Pinto into production? Ask yourself what you would have done if you were Ford. How could this situation have turned out differently using a variety of ethical and decision making principles?

Part 1: Developing the Pinto

The late 1960s and early 1970s was a time of increasing change in the automobile industry. Ford and other American manufacturers were facing increasing competition in the subcompact car market from German and Japanese vehicles. Ford and Chevrolet were already experimenting with subcompact cars such as the Ford Falcon and Chevy Corvair, but in order to remain competitive, American car manufacturers had to provide better compact options for customers.. Under executive vice president Lee Iacocca, Ford went forward with a plan to develop a second generation subcompact car, the Pinto. To be competitive with foreign competition Iacocca required the engineers to design a car that weighed less than 2,000 lbs and cost less than \$2,000. The low-priced, high economy Pinto would present strong competition against foreign manufacturers and, according to Ford, get first time buyers to become loyal customers of the Ford brand.

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When planning began in the summer of 1967, Iacocca set an ambitious goal for the project's completion and production: the Pinto would be in showrooms by the 1971 Model Introductions, which would take place at the end of 1970. This would cut the the typical production timeline from three and half years to two years, the shortest production planning period ever attempted to that date. Ford's timeline allowed them to introduce their second generation subcompact car in the same year as their competitors, American Motors and Chevrolet, which introduced their subcompacts, the Gremlin and the Vega.



Among the design constraints, Iacocca worried that the Pinto's trunk space would be too small. Many European and Japanese models placed their gas tanks above their rear axle, which limited trunk capacity, but was considerably safer. In order to accommodate perceived consumer demand for greater trunk space, engineers decided to place the gas tank behind the rear axle, about 9 inches from the rear bumper, where it would be vulnerable during rear-end collisions. One engineer said of the decision, "You have no idea how stiff the competition is over trunk space. Do you realize if we put a Capri-type [above the axle] tank in the Pinto, you could only get one set of golf clubs in the trunk?" The decision to place the gas tank in a dangerous position behind the rear axle was not out of line with automobiles of the day. However, other aspects of the Pinto's design increased the danger of the new position.

The Pinto's bumper, according to Law Professor Gary Schwartz, "was essentially ornamental." It lacked the reinforcing structures found in other cars. Notably, other light weight cars such as the Gremlin and the Vega employed a similar design in an effort to reduce the weight and cost of the car. Further, bolts protruding from the rear axle transfer case threatened to tear the fuel tank in the event of a rear end collision. Finally, the fuel filler pipe would disconnect from the tank during a rear-end collision, spilling gasoline. Despite these flaws, Ford continued production of the Pinto.

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An important player in the Pinto case was the National Highway Traffic Safety Administration (NHTSA). The NHTSA was worried due to studies showing nearly 3,000 automobile deaths a year involved burning. In 1968, they proposed Federal Motor Vehicle Safety Standard 301 to improve “fuel system integrity.” The proposed standard required that all new cars in 1972 could withstand a 20 mph rear collision without spilling gasoline, and by 1973, all new cars could withstand a 30 mph collision. Ford, along with the rest of the auto industry lobbied against implementing the standard. They were successful, and the NHTSA did not produce another standard until 1973. Nevertheless, Ford performed rear end crash tests under the assumptions of the 1968 proposed standard, partially to be able to respond to the NHTSA’s proposal. Test results were disturbing. Of the 11 Pintos tested by Ford, only 3 passed the proposed standard. The 8 that failed all used the standard tank design with no modifications. The 3 that passed included modifications to the tanks to protect them and reduce gas spillage. These modifications included putting a rubber bladder around the gas tank, reinforcing the tank walls, etc. Any one of these modifications would have cost approximately \$11 which would have pushed the price of the Pinto over the \$2000 required price point.



Ford knew that the Pintos had a serious safety flaw, but couldn’t solve the problem easily. Iacocca’s record production timeline had forced Ford to change its production system. Normally, design, engineering and testing were conducted before production factories were tooled. Under Iacocca, many processes had to be completed simultaneously in order to meet the schedule. This made Pinto redesign costly. Ford engineers proposed several modifications to improve the Pinto’s safety, but Ford postponed improvements until the NHTSA introduced a fuel system integrity regulation, which didn’t happen until 1973 and didn’t take effect until 1977. So when the Pinto came onto the market in 1971, it came with the standard tank. According to the later testimony of executive Harley Copp and other evidence, Ford’s executives knew the dangers associated with the Pinto and approved the project anyway.

Part 2: The Crash



(This is the account given in the court brief from Ford's appeal of the case in 1981)

"On May 28, 1972, Mrs. Gray, accompanied by 13-year-old Richard Grimshaw, set out in the Pinto from Anaheim for Barstow to meet Mr. Gray. The Pinto was then 6 months old and had been driven approximately 3,000 miles. Mrs. Gray stopped in San Bernardino for gasoline, got back onto the freeway (Interstate 15) and proceeded toward her destination at 60-65 miles per hour. As she approached the Route 30 off-ramp where traffic was congested, she moved from the outer fast lane to the middle lane of the freeway. Shortly after this lane change, the Pinto suddenly stalled and coasted to a halt in the middle lane. It was later established that the carburetor float had become so saturated with gasoline that it suddenly sank, opening the float chamber and causing the engine to flood and stall. A car traveling immediately behind the Pinto was able to swerve and pass it but the driver of a 1962 Ford Galaxie was unable to avoid colliding with the Pinto. The Galaxie had been traveling from 50 to 55 miles per hour but before the impact had been braked to a speed of from 28 to 37 miles per hour.

At the moment of impact, the Pinto caught fire and its interior was engulfed in flames. According to plaintiffs' expert, the impact of the Galaxie had driven the Pinto's gas tank forward and caused it to be punctured by the flange or one of the bolts on the differential housing so that fuel sprayed from the punctured tank and entered the passenger compartment through gaps resulting from the separation of the rear wheel well sections from the floor pan. By the time the Pinto came to rest after the collision, both occupants had sustained serious burns. When they emerged from the vehicle, their clothing was almost completely burned off. Mrs. Gray died a few days later of congestive heart failure as a result of the burns. Grimshaw managed to survive but only through heroic medical measures. He has undergone numerous and extensive surgeries and skin grafts and must undergo additional surgeries over the next 10



surgeries and skin grafts and must undergo additional surgeries over the next 10 years. He lost portions of several fingers on his left {Page 119 Cal.App.3d 774} hand and portions of his left ear, while his face required many skin grafts from various portions of his body. Because Ford does not contest the amount of compensatory damages awarded to Grimshaw and the Grays, no purpose would be served by further description of the injuries suffered by Grimshaw or the damages sustained by the Grays.”



In 1977, Grimshaw, as well as Grey’s family sued Ford for wrongful death and other charges.

Part 3: The Documents

During the trial, counsel for the plaintiffs offered two pieces of evidence meant to establish Ford’s corporate mentality: The NHTSA’s estimation of the cost of an automobile death an internal Ford report titled “Fatalities Associated with Crash-Induced Fuel Leakage and Fires.” The NHTSA’s report looked like this:

Table 2-1
NHTSA Report

Societal Cost Components for Fatalities	
Component	1971 Costs
Future Productivity Losses	
Direct	\$132,000
Indirect	41,300
Medical Costs	



Future Productivity Losses	
Direct	\$132,000
Indirect	41,300
Medical Costs	
Hospital	700
Other	425
Property Damage	1,500
Insurance Administration	4,700
Legal and Court	3,000
Employer Losses	1,000
Victim's Pain and Suffering	10,000
Funeral	900
Assets (Lost Consumption)	5,000
Miscellaneous	200
Total per Fatality	\$200,725



Using an estimate based on the NHTSA's study, Ford produced an internal memo revealing the cost benefit analysis of increased safety measures in Ford vehicles in accordance with NHTSA regulations. It was intended to be submitted to the NHTSA. This particular memo dealt with the costs of modifications needed to prevent fires in rollover situations, only one of the areas covered by the new regulations, which also included rear end impacts. Notably, the report included this statement: "analyses of the other portions of the proposed regulation would also be expected to yield poor benefit-to-cost ratios." The analysis looked like this:



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Table 2-2
The Ford Report

Benefits and Costs Relating to Fuel Leakage Associated with the Static Rollover Test Portion of FMVSS 208
Benefits
Savings: 180 burn deaths, 180 serious burn injuries, 2100 burned vehicles
Unit Cost: \$200,000 per death, \$67,000 per injury, \$700 per vehicle
Total Benefit: $180 \times (\$200,000) + 180 \times (\$67,000) + 2100 \times (\$700) = \49.5 Million
Costs
Sales: 11 million cars, 1.5 million light trucks
Unit Cost: \$11 per car, \$11 per truck
Total Cost: $11,000,000 \times (\$11) + 1,500,000 \times (\$11) = \$137 \text{ Million}$

These documents seem to suggest that Ford, valuing the life of an individual at \$200,000 (over \$3 million today), did not deem the \$11 dollar modification worth the added safety benefits the modification would provide. The cost to Ford of adding plastic shields to its vehicles was nearly three times more expensive than the cost to society. The judge ruled this document as inadmissible because it only cited rollover damage, but these documents have become famous for showing how lives can be weighed in a corporate cost-benefit analysis.



The trial continued for 6 months. Eventually, the jury decided in favor of the plaintiff, awarding \$560,000 to Gray's family for wrongful death, \$2.5 million to Grimshaw for compensatory damages, and a whopping \$125 million in punitive damages. When Ford motioned for a new trial, the judge proposed to reduce the punitive damages to \$3.5 million, but only if Ford would accept the outcome of the trial. Ford accepted, but would appeal the trial in the California appellate courts. The appeal was heard, but the original ruling was affirmed by the appellate court. When Ford appealed to the state court, they were denied a hearing.



Part 4: The Aftermath

An article in Mother Jones magazine printed in 1977 called "Pinto Madness" enflamed public opinion against Ford. Public outcry and protests led the NHTSA to open recall proceedings against Ford and several other court cases were pending against the company. Finally, in 1978 and Ford voluntarily recalled the 1.5 million Pintos produced from 1971-1976.

The total number of deaths caused by the Pinto is unknown. Mother Jones claimed as many as 500 to 900 people died due to the Pinto. The NHTSA reported 27 deaths and 24 nonfatal burn injuries. NHTSA reporting shows that 1.9% of cars on the road between 1975-76 were Pintos, and that Pinto deaths accounted for 1.9% of automobile related deaths in the country. However, Pintos accounted for 4.1% of all fatal vehicle fires. Statistics show that the Pinto deaths were variably equivalent to other subcompact cars of its era, and the data fails to prove that the Pinto was substantially more lethal than any other similar car.

Grimshaw v. Ford was not the only high profile case involving the Pinto. In 1978, three teenage girls burned to death in a 1973 Pinto after being rear-ended by a Chevy van. Ford was sued by Elkart County, Indiana for reckless homicide. However, the reckless homicide statute only applied to actions taken after 1977 and did not apply to the



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Part 5: Conclusion

Today, the Ford Pinto Case is a widely used in business classrooms around the world. It remains a popular subject of debate. Was Ford guilty of reckless homicide? Has Ford been painted in a bad light because of the Pinto, despite the flaws in other vehicles of the day? Should Ford have had to pay the \$125 in punitive damages? How should we value human life next to profitability concerns? How should corporate executives make decisions about consumer products? How should Ford have acted? Did Ford get off easy, or are they demonized? Should corporations to be punished for their misdeeds?

You will have to decide how you think these decisions should be made. Is a utilitarian calculus the best way to guide your decision making? What rule ought Ford to have followed? How do different ethical theories inform this case?



Ethical Decision Framework: FISH SEDER

There are numerous frameworks for structuring the information needed to make clear ethical thoughts. Each focuses on similar elements, varying primarily in what areas they place their emphasis. To help you remember the elements of the framework we will be using we came up with the mnemonic device **FISH SEDER**. The elements are listed below, but we will describe each in turn.

Facts: Collect and identify

Issues: Identify the ethical issues

Stakeholders: Assess who the stakeholders are

Harms: Identify the harms to those stakeholders

Solutions: Solutions to the ethical problems

Evaluation: Evaluate each solution, including probable outcomes

Decide: Decide which decision is best

Explain: Explain why

Reflect: Reflect on what actually happens

Data Collection: FISH refers to the data collection portion of the analysis.