Sage Business

Ford Pinto: Is Cost-Benefit Analysis Allowed in Ethical Decision Making?

For the most optimal reading experience we recommend using our website. A free-to-view version of this content is available here, which includes an easy to navigate and search entry, and may also include videos, embedded datasets, downloadable datasets, interactive questions, audio content and downloadable tables and resources.

Author: Christoph Lütge

Pub. Date: 2018

Product: Sage Business Cases

DOI: https://doi.org/10.4135/9781526442093

Keywords: Ford Pinto, cost benefit analysis, ethical analysis, costing, ethical decision making, bladder, rubber

Disciplines: Business & Management, Business Ethics & Corporate Social Responsibility, Business Ethics (general), Corporate Social Responsibility

Access Date: August 11, 2023

Publishing Company: SAGE Publications: SAGE Business Cases Originals

City: London

Online ISBN: 9781526442093

© 2018 SAGE Publications: SAGE Business Cases Originals All Rights Reserved.

This case was prepared for inclusion in SAGE Business Cases primarily as a basis for classroom discussion or self-study, and is not meant to illustrate either effective or ineffective management styles. Nothing herein shall be deemed to be an endorsement of any kind. This case is for scholarly, educational, or personal use only within your university, and cannot be forwarded outside the university or used for other commercial purposes.

The case studies on SAGE Business Cases are designed and optimized for online learning. Please refer to the online version of this case to fully experience any video, data embeds, spreadsheets, slides, or other resources that may be included.

This content may only be distributed for use within Seneca College Libraries.

2023 Sage Publications, Inc. All Rights Reserved

Abstract

The Ford Pinto case was a major scandal during the 1970s. In order to lower costs of production, Ford managers chose not to install a hull to the gas tank of the Pinto model that would have prevented leakages of fuel during crashes. The case is presented here as a study for critically discussing the role cost-benefit analysis plays in ethical decision making.

The development and increased awareness of business ethics started in the US during the 1970s, as a consequence of several corporate scandals. One of these was the case of the Ford Pinto, which continues to provide a number of important lessons about the ethical behavior of corporations.

Case

Learning Outcomes

After analyzing this case study, students should be able to:

- Understand how and why acting as a corporate manager has an ethical dimension

© Christoph Lütge 2018

- Reflect on the social responsibility of corporations
- Grapple with the relationship between ethics and profits
- Consider the role of soft skills in business with regard to the reputation of a company

Ford Pinto – The Problem and Background

In May 1968, Lee Iacocca, vice-president of Ford at the time, had the company develop a new subcompact car. The major reason for this decision was the increased popularity of smaller Japanese cars (and others, like the Volkswagen Beetle) in the US market. The new Ford model Pinto was developed within two years and introduced into the market in 1970. It was produced until 1980 and eventually sold fairly well (approximately 3.1 million cars sold over the entire life span of the model).

During product development, several conditions had to be met. The car was meant to cost no more than $2000, which led to a tight calculation (approximately $12,000 in 2017; to compare prices in the 1970s to today, multiple by six). In order to save money, the design was to be kept as simple as possible. One consequence was the design of the gas tank, which was located behind the rear wheel and neither isolated nor protected against leakages caused by accidents. This problem in the structural design meant that in rear-end collisions at relatively low speed (around 30 mph), gas could leak, catch fire, and cause explosions. This type of accident with a resulting fire happened numerous times and was also covered widely in the media at the time (there are several videos on YouTube showing exploding Ford Pintos, e.g., https://www.youtube.com/watch?v=1mqu-gRqt3g). For further information see Birsch and Fielder (1994).

The Ford Cost-Benefit Analysis

The decision-making heuristic of a cost-benefit analysis can roughly be summed up as follows: first, you gather possible solutions to a particular situation. Second, you list potential consequences of each alternative solution and subsequently compare and evaluate them on a scale. Those evaluated negatively will be *costs*, and those evaluated positively will be *benefits*. Third, you sum up costs and benefits on a balance sheet and choose the solution with the highest balance.

© Christoph Lütge 2018

The problem of the gas tank was known to the company before production of the car began. Ford engineers had identified this weakness and come up with a solution: The tank could have had a rubber bladder installed, which would have cost $11 per car. However, Ford managers and statisticians calculated that 12.5 million Ford Pintos were planned to be produced, and at an additional cost of $11 per car would have meant a total additional expense of $137.5 million.

On the other hand, if the rubber bladder was not installed, Ford statisticians calculated the following "cost": they estimated that 2100 burnt vehicles would yield 180 dead and 180 seriously injured people. Their "value" was also calculated, in the following way: a dead person was given a value of $200,000 (an official value used by the US government, not exclusive to Ford). Ford was believed to have referred to a study released by the National Highway Traffic Safety Administration (NHTSA), where a "social cost" of fatalities by components was calculated at $200,725 per fatality.

For seriously injured people, a value of $67,000 used by insurance companies was calculated, and a burnt car was given an average value of $700. Thus, this calculation yielded a total cost of $49.5 million dollars. So Ford drew the conclusion that *not* installing the protective rubber bladder would be $88 million cheaper – and indeed made this decision.

The Aftermath

Estimates of deaths caused by Pinto vary across investigations. In a 1977 article that greatly increased the negative publicity of Ford Pinto, the journalist Mark Dowie gave an estimate of between 500 and 900 fire-related deaths in total. Reports from Ford itself and NHTSA calculated about three to seven unnecessary deaths per year, which amounted to a total of between 30 and 70 deaths, as well as around 120 serious injuries over the entire planned production time of the car.

Ford went through a series of lawsuits and declining sales due to bad publicity, which was to some extent also caused by the pictures of burnt-out Pintos in the media. Still, the company did not recall the defective Pintos to improve the tank safety until after implementation of a new safety regulation as well as a public investigation by the NHTSA in 1977 and 1978.

Thus, the company faced legal as well as ethical problems: Ford was the first US company to be charged with manslaughter, in 1978. No verdict was issued; however, half a million Pintos were recalled in 1978

and upgraded, with an estimated cost of between $20 million to $40 million. In 1980, five months after the manslaughter trial, Ford decided to terminate the production of the Pinto, just a few months ahead of its scheduled end.

Problems during Product Development

It was believed the product development of Pinto was significantly shortened in order to compete with other car producers from Japan and Germany. The fact that the gas tank could easily be damaged in rear-end collisions, leading to explosions, was known to Ford engineers. However, preparations for production were already underway and considerably advanced; therefore, managers at Ford decided to deliver the Pinto to the market anyway. Officially, Ford denied possessing such information prior to production.

It has also been asserted that Ford actually held a patent for safer gas tanks that they had already used in the Ford Capri, produced at the time of development of the Pinto, and that such a design was rejected for the Pinto because it occupied too much space that could otherwise be used for luggage. On the other hand, the Pinto tank system was standard for similar cars during its time and was also later officially accepted (after improvements) as being adequately safe.

Documented reports from Ford revealed that crash tests had actually been performed on Pinto cars and that these tests provided Ford engineers with enough information to both inform their managers about safety issues as well as about relatively cheap remedies. The question is then why, despite all this information, Ford did not upgrade the Pinto cars until 1978. Mark Dowie accused Ford of having conducted an unethical cost-benefit analysis (cited above), putting monetary values on human lives, and then deciding against recalling and upgrading the defective Pinto cars.

Facts to Take Into Account

Intuitively, many would probably judge the cost-benefit analysis undertaken by Ford as unethical. However, some points should be considered:

- First, it should be clear that Ford did not break a law nor violate a standard for gas tanks. Regulation

© Christoph Lütge 2018

at the time said only that a gas tank had to remain intact in case of collisions at a speed of 20 mph or slower. This regulation was met by the Pinto, and there were no further rules with regard, for example, to non-flammability in case of collisions at a higher speed.

- Second, while $11 seems a small amount at first glance, in sum these costs would have amounted to 0.5% of the total revenue for the entire Ford Motor Company – which is significant.
- Third, Ford insisted that statistically, the Pinto was as safe as other cars of its category, meaning that it was not involved in a higher-than-average number of accidents. (It is, however, safe to say that the Pinto accidents often turned out to be much more spectacular and deadly than those of other cars.)
- Before claiming that valuing human lives with monetary costs is unethical under any circumstances, it should be noted that this valuation is performed regularly (for example by assurance companies) and to some extent is unavoidable. The reason is not just that it is efficient from an economic point of view, it is also the consequence of a situation where conflicting (ethical) goals must be weighed against each other. Two examples: first, beginning in the 1990s, all new cars were required to be fitted with airbags. However, regulation (usually) did not require older cars to be fitted with airbags, too, although it certainly would have substantially increased their safety. Second, it would certainly reduce the number of accidents to virtually zero if a maximum speed of, say, 10 mph were introduced. However, this would conflict with other goals such as increased mobility.

What alternative decision criteria could Ford have followed? First, it could be argued that Ford should have unconditionally respected rights to life and met reasonable safety expectations from consumers, either by upgrading defective tanks immediately after its discovery or by informing consumers about the defects. It is, however, debatable what reasonable safety expectations are, beyond those stated in the regulations.

Another view could be put forward, suggesting that the harms and benefits to all parties involved in a recalling decision should be enumerated in an ethical decision-making process. In the case of Ford, not recalling could have saved millions of dollars, but it resulted in many unnecessary deaths and injuries, while costing the company millions of dollars to settle the lawsuits. It also earned them a great deal of bad publicity and a tarnished reputation, and in the end millions of dollars were spent on recalling vehicles anyway. However, it could be answered that Ford could not have anticipated the actual consequences accurately.

Concluding Remarks

For Ford, a major reason for the 1978 recall of the Pinto certainly was the massive loss of reputation the

© Christoph Lütge 2018

company experienced, even if it could not be properly quantified at the time, due to the cost-benefit analysis having become public. It is open to debate whether this means rejecting calculating “costs” of human lives at all, or whether this merely means rejecting a certain way of calculating them, taking into account more and greatly different types of “costs.”

In any case, the Ford Pinto, along with a number of other similar scandals, marked the beginning of the discussion about business ethics and *corporate social responsibility*. This debate continues to evolve, but often comes back to a central question of the Pinto case: are ethics and profits compatible in general?

Discussion Questions

It is your turn now to evaluate the behavior of the Ford management team from an ethical perspective. Focus in particular on the use of cost-benefit analysis.

1. Why did Ford not install the protecting rubber bladder?
2. Why was it wrong for Ford not to install the protecting rubber bladder?
3. Should it have been obvious to Ford that it was wrong not to install the protecting rubber bladder?
4. Is the use of cost-benefit analysis allowed at all? Under what circumstances?
5. Is it ethical under all circumstances to try to be more cost conscious than competitors? Are there limits?
6. What types of “cost” should companies take into account?
7. Discuss the general question of the compatibility of ethics and profits.

Further Reading

Birsch, D. & Fielder, J. (1994). *The Ford Pinto case. A study in applied ethics, business and technology*. Albany, NY: State University of New York Press.

Dardis, R. & Zent, C. (1982). The Economics of the Pinto recall. *Journal of Consumer Affairs*, 16(2), 261–277.

Gioia, D. A. (1992). Pinto fires and personal ethics: A script analysis of missed opportunities. *Journal of Business Ethics*, 11(5–6), 379–389.

© Christoph Lütge 2018

Schwartz, G. T. (1991). The myth of the Ford Pinto case. *Rutgers Law Review*, 43, 1013–1068.

Stuart, R. (1980). Government notifies Ford of possible recall for 16 million autos. *The New York Times, June 11*, 1980.

https://doi.org/10.4135/9781526442093