Ford and Recalls - are they inseparable?

R. Jagadeesh

Shyam, a fresh management graduate from a tier-2 institute was recollecting his campus placement scenario. How the company selected him among the more than fifty aspirants who had lined up for the selection process. The interview went off smoothly and he landed his dream job of working for a multinational automobile company. He was offered the job of associate sales executive, though the title did not make much sense to him.

As he rushed in to the Ford company's local showroom on the day of reporting, he saw the regional sales manager Mr. Devangam surrounded by the showroom's staff. An informal meeting, he thought and joined the group.

"Listen, all of you. Now you have a much tougher job of selling the cars. Are you aware of the current happenings pertaining to our company's cars?". Mr. Devangam raised his voice.

Nobody replied.

Devangam continued. "Look, all of you need to put in extra efforts. Ensure better footfalls. Try for maximum conversion. I am leaving some newspaper snippets for you to understand the situation. All of you should read them and develop your own ways of handling the customers' queries".

Again silence prevailed.

Shyam became nervous and pulled a copy of the news. As he started reading he became more worried and wondered whether he would be able to perform well in his job.

As reported in FORD MEDIA CENTER

Ford Motor Company Issues Two Recalls in North America

May 15, 2019 | Dearborn, Michigan.

Dearborn, Michigan., May 15, 2019 - Ford Motor Company is issuing two safety recalls in North

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The case writer(s) R. Jagadeesh, Professor - Operations, SDMIMD, Mysore may be reached at jagadeeshraj@sdmimd.ac.in Author(s) have prepared this case as the basis for class discussion rather than to illustrate either effective or ineffective handling of the situation. The case is related to a sector and a specific company. The case is based on the information available in the public domain. This publication may not be digitized, photocopied, or otherwise reproduced, posted, or transmitted, without the permission of SDMRCMS, SDMIMD, Mysore. For Teaching Notes please contact sdmrcms@sdmimd.ac.in.

America.

Ford recalls 270,000 Fusion cars to fix a glitch that can cause vehicles to shift gears and roll away. Ford Motor issued a recall of more than 270,000 Fusion vehicles in North America because of a transmission issue that can allow the cars to shift into a different gear than the one the driver selected. This can cause the vehicles to roll away if the parking brake is not applied.

Ford said it is aware of three reports of property damage due to the issue and one injury "potentially" related to the problem.



Ford Motor Co. Fusion vehicles move down the production line at the Flat Rock Assembly Plant in Flat Rock, Michigan. Jeff Kowalsky | Bloomberg | Getty Images

The recall is for 2013-16 Fusion vehicles with 2.5-liter engines that were built at the automaker's Flat Rock, Michigan, and Hermosillo, Mexico, assembly plants.

The company said the bushing that attaches the shifter cable to the vehicle's transmission may detach, which can result in "unintended vehicle movement." Ford said it is aware of three reports of property damage due to the issue and one injury "potentially" related to the problem. About 260,000 of the cars were recalled in the United States. More than 10,000 and 3,000 vehicles were also recalled in Canada and Mexico, respectively.

Ford also recalled about 3,000 2019 Ranger pickup trucks in the United States and Canada that were built at the company's Wayne, Michigan, assembly plant. The automaker cited another transmission issue for the Ranger recalls, saying that the transmission shift cable bracket in affected vehicles may not have been torqued correctly and can eventually come lose. This can cause the vehicle to shift into a different gear than the one selected by the driver, which can lead to the pickup truck rolling away and "increasing the risk of crash or injury."

The company said it has not received any incident reports regarding the faulty Ranger vehicles.

Ford recalls 465,000 vehicles to fix fuel leaks

Ford is recalling about 465,000 cars and SUVs because the fuel tanks can leak and cause fires.

The global recall affects the Ford brand's Fusion, Explorer, Taurus, Flex, Police Utility and Police Interceptor. Also covered are the Lincoln MKS, MKT and MKZ. All the vehicles are from the 2013 model year.

Ford says a connector from the fuel tank to the fuel line is the source of the leak. Customers could smell gas or see a leak on the ground. The company says no fires or crashes have been reported because of the problem.

Dealers will replace the fuel delivery module, which includes the connector, a Ford spokeswoman said.

About 390,000 of the vehicles are in the U.S., with another 23,000 in Canada and 7,600 in Mexico. The rest are in Europe, South America, Asia and other areas.

Read more here: http://www.kansascity.com/2013/06/03/4270826/ford-recalls-465000-vehicles-to.html#storylink=cpy

In February 2019, the Ford company announced the recall on select 2011 to 2013 Ford F-150 vehicles with six-speed automatic transmissions, 2017 to 2019 Lincoln Continental vehicles, and select 2019 Ford Mustang, Lincoln Nautilus and Lincoln Navigator vehicles.

"Depending on vehicle speed, a downshift to first gear without warning could result in a loss of vehicle control, increasing the risk of a crash," Ford said in a statement announcing the recalls, as reported by www.cnbc.com. The unintended downshift to first gear in certain F-150 pickups caused at least five accidents, and the company went for announcing the recall.

It was continued further in the website that as about 27,000 Lincoln Continental vehicles may have a problem with silicon contamination in the door latch, which can prevent it from fully engaging. This means the door could open while driving. Ford is not aware of any accidents connected to this recall.

About 4,200 Ford Mustang, Lincoln Nautilus and Lincoln Navigator vehicles may have a defect that causes the instrument cluster to be blank while the video starts up. Ford is not aware of any accidents connected to this recall either.

How critical are these recalls? Shyam's worries

Do these instances of several recalls in the recent past show Ford's vehicles as not safe and even dangerous on road, that may lead to fatalities? Well, there could be a temptation to answer affirmatively because the car producing company has a history of recalls almost occurring on a regular frequency. While the company keeps releasing new cars always ahead of its competitors, it is surprising that the new breed of vehicles also proved to be defective in one manner or the other, causing fatal accidents forcing the company to voluntarily recall the vehicles.

Let's first define what a recall is?

According to https://en.wikipedia.org/wiki/Product_recall,

"A product recall is a request from a manufacturer to return a product after the discovery of safety issues or product defects that might endanger the consumer or put the maker/seller at risk of legal action".

It is further stated that "A country's consumer protection laws will have specific requirements in regard to product recalls. Such regulations may include how much of the cost the maker will have to bear, situations in which a recall is compulsory (usually because the risk is big enough), or penalties for failure to recall. The firm may also initiate a recall voluntarily, perhaps subject to the same regulations as if the recall were compulsory."

Product recalls can be involuntary (required by a regulatory agency or the government) or voluntary (the manufacturer notices a defect that is unlikely to force an involuntary recall), (https://www.investopedia.com/terms/p/product-recall-insurance.asp).

Procedure followed in a product recall

A product recall usually involves the following steps, which may differ according to local laws: (https://en.wikipedia.org/wiki/Product_recall)

- Maker or dealer notifies the authorities responsible of their intention to recall a product. In some cases, the government can also request a recall of a product. Consumer hotlines or other communication channels are established. The scope of the recall, that is, which serial numbers or batch numbers etc. are recalled, is often specified.
- Product recall announcements are released on the respective government agency's website (if applicable), as well as in paid notices in the metropolitan daily newspapers. In some circumstances, heightened publicity will also result in news television reports advising of

the recall.

- 3) When a consumer group learns of a recall it will also notify the public by various means.
- 4) Typically, the consumer is advised to return the goods, regardless of condition, to the seller for a full refund, repair, replacement or modification.
- 5) Avenues for possible consumer compensation will vary depending on the specific laws governing consumer trade protection and the cause of recall.

According to automobile market experts, recalls are neither new nor sensational to the public. It may not be exaggerating to say that recalls of automobiles, in particular, the cars, have become so common and so often reported in the media, the numbers and the brands are hardly noticed. Probably, recalls do not cause much frustration or tension among the manufacturers as they did earlier. Because the number of recalls has gone up substantially and most of the automobile companies have undergone this ignominy. More than 60 pages of car recalls' list is given in https:// www.autoevolution.com /news/recalls/. Most of the top selling brands can be seen in the list. Frequently list of recalls are published, for example, DeMeter (2012) and Wong (2017). A look at these lists clearly suggest that the problem is endemic across the globe. This is substantiated by the major recalls by world's top auto makers as listed in White (2018).

As stated by NHTSA, (National Highway Traffic Safety Administration) of USA, since 1966, 390 million motor vehicles have been recalled in the USA. These recalls are a good topic for research for example Bates, et al. (2007), wherein the authors have analysed the trends of recalls.

But, the recalls cannot be dismissed as trivial or inconsequential under any circumstance. There are many instances of the cars malfunctioning and leading to dangerous accidents, killing people or destroying the property. This makes the recalls a terrible disaster and has to be addressed with all seriousness, Greenwald (2001 a and b)

Product recalls what do they say about quality?

Product recalls are considered as failures reported from the market, either under use by the customers, or stationed at dealers', distributors', and showroom premises. In the cost of quality jargon, the associated cost of recalls is declared as "external failure cost" under the "cost of poor quality" categories. In most of the cases the recalls have been successfully released to the market after proper corrections were made, given the ability to handle the cause of recall successfully. But recalls do involve additional costs in the form of logistics, cost of handling the defects, compensation cost and cost associated with legal tangles if the matter goes to the law courts,

and of course the opportunity loss and the loss of goodwill, which are difficult to quantify, Warwick et al. (2004).

Further, the product recalls send negative message to the market, and to the customers, given the publicity they receive in the media. The defect or the lack of quality, which led to poor performance or caused an unsafe situation to the customers, is not taken lightly by the customers. In fact, there may be an agitation or a protest from the users or people to withdraw the poorquality product from the market. This cost is again not easily determinable. Hence it is easy to visualize how devastating the recalls could be in terms of the total loss to the company.

While the monetary losses arising out of the recalls are compensated and later adequately recovered by the company, the loss due to death of people cannot be quantified or compensated. This is where the recalls appear like death news to the company in a literal way.

Ford, a legend, a technology pioneer, and not able to ensure quality and safety?

The name "Ford" is synonymous with the advent of automobiles ever since the founder Henry Ford started the mass production of passenger cars, more than a century ago. Given the huge proliferation of the automobile companies that are omnipresent across the globe, how a manufacturing company like Ford has maintained its footprint with pomp, and valour, for more than hundred years, is perhaps no less than a mystery. Henry Ford who started the Ford Motor Company as a family owned business, is described in literature by many labels, for example, innovator, greatest businessman, astute technocrat, an icon of grit and glory, and by so many other words. In fact, the word "Fordism" was coined to describe an enterprise associated with mass production, intense labour force, and a huge capital investment. As quoted in Wikipedia, "Fordism is the basis of modern economic and social systems in industrialized, standardized mass production and mass consumption. The concept is named for Henry Ford. It is used in social, economic, and management theory about production, working conditions, consumption, and related phenomena, especially regarding the 20th century".

Ford's new slogan as stated in their website www.ford.com is "Our aspiration: To become the world's most trusted company, designing smart vehicles for a smart world". This clearly indicates that the Ford company has targeted to be the most trusted company, which means their products are accepted as reliable, safe, and a pleasure to drive. The car is not just a mode of transportation but can lead to satisfaction, by virtue of its quality and performance.

What was Ford company's original motto? As stated by, History of Ford Motor Company. (2019),

the founder Henry Found decided about providing a personal transport system for people who want to go from place to place. Prior to the advent of cars, people relied on horses and the maintenance cost was pretty high along with several other risk factors. Having observed this trend, Henry Ford thought of setting up a new car design and development so that the vehicle is not just for personal transportation but also for a new style of life.

It is well known and rightly remembered that the other contemporaneous automobile companies, say for example, Oldsmobile, did not survive beyond a few decades. While the other companies faded out due to technical and commercial reasons, Ford like a juggernaut has maintained its status all through its one hundred plus years of existence. No doubt the legacy of the Ford family continues to support the company through the high brand value, and the company is almost a household name across the globe.

Long back Ford established a "Statistical Quality Control" division in Michigan, USA, where they already had a manufacturing plant. This division is involved in a detailed analysis of quality related issues the company may be facing and offers solution to them. In addition, research work is carried out by experts and proper decisions are taken to improve the design and manufacturing functions. Incidentally people working in this centre have produced high quality research papers and also created several new systems and practices to help the company improve its position in the market.

Ford Pinto - the harbinger of controversies related to the safety of the Ford cars?

Controversies surrounding the safety of Ford cars goes back to the era of Ford Pinto, a smaller sedan released in 1971. As stated by Danley (2005), the smallest American Ford vehicle since 1907, the Pinto was the first subcompact vehicle produced by Ford in North America. Interestingly the Ford Pinto was approved in design, production and release under the leadership of legendary Lee Iacocca, who had successfully heralded the turnaround of the Chrysler auto company.

Ford Pinto was initially offered as a two-door sedan, and later as hatchback and wagon models from the following year. With over 3 million sold over a 10-year production run, the Pinto competed in the U.S. market against the local and the foreign car makers. The car was a hit with the public and the sales showed an impressive figure year after year. But soon a controversy erupted particularly with the accidents wherein the collision occurred from the rear end. It is interesting to note here that the car had an engine mounted at the rear side. Due to the impact of the collision at the rear end, the fuel tank would get damaged leading to leakage of the fuel, and subsequently leading to fire. This further led to explosion and severe injuries to the occupants.

Ford company contended that the casualties and injuries are due to the injuries caused by the accident and the fire issue was due to collision alone, and not a safety issue related to the car, Schwartz (1991).

According to (Wikipedia Contributors, 2019), there were significant differences in the reports submitted about the safety by the NHTSA and the National Safety Council, causing confusion to the buyers. The Ford Company insisted that they have taken all the safety features but the fatalities proved the company wrong and the public demanded the company withdraw the vehicles. Ralph Nader, the crusader of consumers' movement, was at the forefront of the public uproar and was able to apply pressure on the company to recall the vehicles. Bowing to the strong pressure, the Ford company announced the recall of Pinto, and the number was in millions.

Ford could have pursued the formal legal recall hearing, but was afraid of additional damage to the reputation they had built over decades. Hence the company agreed to a "voluntary recall" program, says Danley (2005). So before the NHTSA was to issue a formal order, on June 9, 1978, Ford released a formal recall order, and recalled 1.5 million Ford Pintos and Mercury Bobcats, amounting to the largest recall in automotive history at the time, as stated by Lee and Ermann (1999). Ford tried to downplay the incident by saying that the recall is to verify the concern of the public about the safety related to the fuel tank explosion, and not because of NHTSA call, as indicated by Jones (1978). By the time of its Pinto investigation, NHTSA had essentially abandoned its original mission of forcing industry-wide safety improvements, in favour of investigating and recalling specific cars, as quoted by Mashaw and Harfst (1990).

Commenting on the recall, Schwartz (1991) states that the Ford company went to the extent of thinking that the compensation payable in case of an accident claim is much lower than the expenses involved in improving the fuel tank design of all the cars. Though the Ford company tested the Pinto car as per the specifications laid out by NHTSA, no concerns were raised about the safety of the car. According to Gioia (1992), the vulnerability of the fuel tank to get damaged during an impact at the rear end, further causing a fire hazard was not critically evaluated by the company. These observations clearly indicate that the company was more worried about the image and not willing to accept the allegations of fire hazard, but finally relented to the public opinion.

Deadly recall; the fight between Ford and Firestone

The next major recall that was about to happen later puts the recall of Pinto into shade. When two legendary companies entangle themselves in a legal battle, the news assumes gigantic

proportions. The protracted legal battle had all the tumultuous scenarios in which the two companies exchanged heat and acrimony. The worldwide publicity and the debate made the case even more contentious for both the companies causing enormous loss of money and resources, as reported in several articles, Kay (2000), Jones (2000a and b), Arndt & Arndt (2001), Ansberr (2001), Greenwald, J. (2001a and b), Firestone case. (2011), Ahsan (2013), and Ferris (2019).

Ford for a long time used to buy tyres supplied by the Firestone company. In fact, the relationship between the two companies did not remained to only as business. The scion of the Ford company was married to a person from the Firestone Company. This was supposed to strengthen the relationship between the two companies. Alas, it was not to be.

A series of deaths in road accidents caused by tread separation in the tyres hit the headlines and the company was under tremendous pressure to detect the cause of the accident. This ghastly accident used to happen at a certain speed and the tyres would burst due to the tread getting separated, and the Ford Explorer car would roll over killing the occupants. Several authors and articles including Jones (2000a and b), McDonald (2001), Moll (2003), McDonald (2004), Press (2005), Biggemann & Buttle (2007), and Firestone case (2011) have documented the details.

The long drawn legal and technical battle between the two companies appeared to be inconclusive with both the companies claiming that their quality checks and practices are well in place and honed to perfection. According to Barboza (2000), the Firestone company workers were found to have not done their quality control function properly. A relaxed approach appeared to be existing that led to inadequate quality processes. Bradsher (2000a, b, c, d) in a series of articles has exposed the weaknesses in the policies, and practices followed by both Ford and Firestone companies. In fact, Bradsher (2001) remarks that the Ford - Explorer car too had design flaws which perhaps compounded the accident hazard. It is also said by him that the Firestone company knew of tyre defects but did not act upon them. This is established by the fact that the rising warranty costs on tyres was well noticed by the Firestone company which did not consider the case important until the death toll started increasing, (Erickson, Moorhead, & Hanson, 2017).

As reported by Kay (2000), both Firestone and Ford were aware of problems with the tires well before the recall was announced. As the evidence started mounting the two corporations attempted to avoid a recall in the United States of at least 6.5 million tires that they knew were faulty. The report further states that 103 deaths in the US and over 150 internationally have been said to be due to the faulty tyres fitted on the Ford Explorer sport utility vehicle (SUV).

A case study by Stern School of Business, New York University, USA, published in 2000, provides the following data:

"Firestone Tires included in the recall were installed as original equipment on Ford Explorer (model years 1991-2000), Mercury Mountaineer (model years 1996-2000), Ford Ranger (pick-up truck model years 1991-2000), Ford F-series Light Trucks (model years 1991-1994), Ford Bronco (model years 1991-1994), Mazda B-series (pick-up truck model years 1994-1996), and Mazda Navajo (model years 1991-1994). Firestone suggested a three-phase recall procedure since Bridgestone-Firestone did not have the production capacity to do it faster".

It is clear that apart for Ford Explorer other models of Ford vehicles were also identified for recall and thus the problem was felt to be more complicated both within and outside the USA.

But the outcome was the century old relationship between the two companies came to an end because of the massive damage the two companies suffered in the aftermath of this recall considered as the most expensive and devastating at that time. This again has been surpassed by the recalls caused due to faulty air bags supplied by the Japanese company Takata.

Analyzing the recalls. Is there a pattern?

Recalls, somehow appear to be germane all through the years from a long time. A closer look at the recalls made by the Ford company indicates the company's inability to avoid recalls with many of its models released to the market. Recalls continue to haunt the Ford company, because even in the recent times recalls continue to attract headlines, Goldman (2019).

How do we title a product recall by a company? A case in ethics, quality, production, maintenance, law, or operations? The recall incidents have become the major stories for many business school cases, and a breaking content for plenty of newspaper, journal, newsletter, and report articles. These cases continue to attract the writers, researchers, journalists, law makers, and general public, because of the mortalities involved.

Given the history of recalls, the word "FORD" has been a butt of jokes and the word has been converted to an acronym with expansions like, "Found On Road Dead", "Fix Or Repair Daily", and "Find Out Regular Defect". While these interesting and humorous expansions evoke laughter, the also stand as testimony to the repeating quality related problems faced by the company. Some of the popular recalls by the Ford company are shown in Table 1.

1988-1992	Mustang
1988-1992	Tempo/Topaz
1988-1992	Thunderbird
1988-1989	Crown Victoria
1988-1990	Grand Marquis
1988-1989	Lincoln Town Car
1988-1991	Aerostar
1988-1991	Bronco/F-Series Light Truck

Table 1. Recalls by Ford

Ford planning to close its plants in Russia

The news was greeted by the car using community with tongue-in-cheek. "Obviously, they don't need any manufacturing plants now. They really need repair shops to rectify all those recalled cars and given the huge number, the recalls after proper rectification can serve to meet the market demand for a long time.



Ford Motor Co.'s 2013 F-150 pickup truck sits on display at an event in Bruceville, Texas, U.S., on Monday, June 4, 2012. (https://www.cnbc.com/2019/02/13/ford-issues-3-recallscovering-nearly-1point5-million-vehicles.html)

How do we understand the recalls?

Do these recalls defy the PAF (Prevention, Appraisal, Failure) quality cost model? Because if the company had shown due diligence in design and production, these kinds of recalls would not have occurred. But given the temptation to pay for compensation, which for a customer is a difficult process thorough the insurance agencies, but easy to deal with by the companies, preventive steps may not be seriously considered. This defeats the quality axiom "do it right the first time, the next time, and every time". But can a company like Ford be suspected not to have a preventive system in place?

Ford happens to be a forerunner in setting up separate quality control departments or centres which included highly qualified and experienced experts who would regularly test and assess the quality of all Ford products and even carried research. Thus the quality checks to be applied were well known to the company people and they even set a benchmark for others to follow, typical of an industry leader. Many experts working there have published top notch quality papers in reputed journals.

The future cars - not just electric cars but integrating artificial intelligence

Ford like any other automobile company in the world has embarked on the production of electric cars and smart cars or the driverless cars. These cars stand at the forefront of the technology which involves a combination of mechanical and electronic systems embedding artificial intelligence techniques. Thus it is a challenge to predict their performance and the filed test that are normally conducted before the launch of the vehicle may not be good or sufficient enough to ascertain the quality or the performance when used by the customers.

Shyam continues to worry

Given the historical perspective on recalls by the Ford company, the new employees like Shyam will continue to wonder as to what future beholds for the company. Some of the imminent issues and questions could be:

- Ford has vendors located all over the globe who supply various parts to the production plants.
- The company has many production and assembly plants located in several countries.
- Ford as a multinational company has a heterogeneous mix of employees

- Ford is well known to introduce new models every year and even customizes the models for a given country
- The Ford world is growing as it did all these years continuing the legacy of the founder.
- So where is the problem? Is there a root-cause analysis?
- Can Ford put an end to these kinds of recalls that are happening for more than half a century?

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