

# Bendix case study

Education



The Bended Corporation is a parts supplier for five separate business units: automotive, the Frame Corporation (filters), aerospace, industrial and energy, and international. In 1951, the Bended Corporation is credited with the invention of electronic fuel injection (EFFIE) and was in sole possession of the accompanying patent until 1978. The company had not utilized this innovation to its fullest potential due to the lack of interest in automotive manufacturers in the United States.

In 1976, Douglas Crane, president of Bended Corporation's automotive division, was mulling over the idea of embarking on the construction of a \$10 million injector manufacturing plant, the main component involved EFFIE.

**Major Problems and Issues** There are many problems facing Bender's customers in 1976, the first and most predominant being government regulations. The government has been tightening and tightening the control over pollution levels in automotive emissions as well as minimum gas mileage requirements for each manufacturers' fleets.

The major car manufacturers were unable to meet these requirements with their current fuel delivery system technology. These demands put added pressure on Bended to revive a solution in order to provide future success and to create a competitive advantage. Another major problem facing Bended was competition from a Busch, a company that Bended earlier had made an agreement with to use Bender's EFFIE technology to manufacture for the European market. Busch was planning on creating a manufacturing plant in the United States, threatening to take away some of the market share away from Bended.

Another issue facing the implementation of EFFIE into the American automotive market is the phenomena that affect innovation in a large corporation. The phenomenon is that with larger economies of scale, the less the many is willing implementing a radically different solution to an old and well- known problem. The company is more willing to improve processes with their innovations, and then to create a whole new product line. The implementations of product innovations are more common in startups than in well-established firms such as Bended.

This phenomenon can explain why EFFIE was put on the back burner and never utilized fully. [1] Possible Solutions There are three possible scenarios for the Bended Corporation when it comes to the new injector manufacturing plant. The first is Bended could build a new state of the art facility. The contract between Busch and Bended allowed them full disclosure, and each company shared their technologies and processes. Bended had a man spend several months studying the methods Busch was using in their production of injectors.

The lessons that were learned during this time can be used to make a plant using new technology Second, Bended could restructure an existing facility to produce injectors. This remodel would take less time and cost less than building a brand new facility. Bended tried this strategy when they started producing their own electronic control units (CEO) by adding production to their radio manufacturing facility. This initial failure was remedied when Crane took control over the SEC production and got the right team together in order to meet a contract with Cadillac.

Lastly, Bended could cancel the new facility and supply the injectors from an outside firm. This strategy that Bended used early in its EFFIE production. Although it does not contain the capital costs of tooling and/or building a facility. This solution has the issue that the current suppliers cannot meet the numbers Bended is looking to supply when/if EFFIE becomes the standard. Recommended Actions The issues that are facing the automotive industry are a factor that will change the environment for these companies causing them to have to make fundamental changes in fuel delivery systems.

These changes will become an opportunity for Bended to pursue EFFIE as the solution for the future regulations and performance standards expected by the American customers. For Bended to become a leader in EFFIE, they will need to have a competitive, and they will not be able to when they are supplying injectors from their competitors. Bended will have to become more vertically integrated by producing their own injectors and using the knowledge they have from their time observing Busch, they can produce them more efficiently and with less waste. The action I would recommend for Crane to pursue is creating their own brand new injector facility.

The facility will be able to supply the future needs for EFFIE due to regulations. Bended will be able to compete and beat Busch in the market due to superior processes. To get past the phenomena such as stated earlier their needs to be a strong leader championing this endeavor and Crane has already proven himself with the SEC project. [2] Conclusion In conclusion, there are a plethora of factors outside of the control of the market such as government regulation and management phenomena inside a large

corporation. A company can come up with a solution that may not be useful at the time such as in this case.

There was no need at the time for EFFIE at its invention because of the less stringent pollution and mileage standards but as time progresses EFFIE became a more and more plausible solution. Whatever choice Bendix made, EFFIE is now standard on all cars and carburetors are a thing of the past.

Bibliography [1] Abernathy, W. , & Turtleback, J. (2014). Pattern of Industrial Innovation. Innovation Management (1-9). Romania, NY: Lines Learning. [2] Schumacher, T. (2014, May 22). Gunfire at Sea. Youth. Retrieved June 16, 2014, from [HTTPS://www. Youth. Com/](https://www.Youth.Com/)