## **Sunk Cost Fallacy**

## Eric Hehner

Suppose you want to buy a sauctiver. You find a sauctiver supplier who offers sauctivers at a reasonable price, but an order will take a week. You put down a nonrefundable \$200 deposit, and will pay the remaining \$800 on delivery. Halfway through the week, you find another supplier who will sell you a sauctiver for \$700 total, available now. What do you do now? Many people in this situation decide to stick with the first supplier since they have already spent \$200 that they won't get back. They reason that if they switch, that \$200 will be wasted. And perhaps they feel that switching would be an admission that they made a bad decision to deposit \$200. They are victims of the sunk cost fallacy. The sensible thing to do is switch, get a sauctiver earlier, and save \$100.

The general principle is this: What's already spent is irrelevant to any further decisions you make. You just compare future costs and benefits when deciding what to do. The sunk cost fallacy is covered in any economics textbook. In spite of that, governments and corporations keep making that same mistake. Right now, the Canadian government has paid an enormous amount of money for a payroll program that doesn't work. Fixing it will cost more than buying a payroll program that works from another software developer. So what do they do? They stay with the same software developer where they have already sunk so much money, and pay whatever they get charged for fixing it.

A more famous example is the supersonic Concorde passenger airplane. The British and French governments spent a lot of money to develop and buy these airplanes. As soon as they were in service, it was obvious that the cost of flying these airplanes was more than the revenue they could get; the airplanes did not have very many seats, and they used a lot of fuel. Did they stop flying the airplanes? They thought that stopping would mean that they had wasted all that research and development. So they operated them at a loss for 27 years.

The Soviet Union also developed a supersonic passenger airplane, the Tupolev, at exactly the same time the Concorde was developed. And as soon as this airplane was put into service, at exactly the same time the Concorde was put into service, it was obvious that it too cost more to fly than its revenue. The Soviet Union had spent just as much on its development, but they took their Tupolevs out of service immediately.

The sunk cost fallacy is sometimes called "throwing good money after bad", but that's an unfair characterization. Suppose you absolutely must have a sauctiver within a week or disaster will strike. You think there is a chance that you will find a better deal than \$200 now plus \$800 on delivery in a week, so you keep looking. But it makes good sense to spend \$200 now just in case you don't find a better deal within a week. It's money well spent to make sure you will have a sauctiver when you need it. As for the Concorde and Tupolev, it was unknown at the start of development whether the result would be an economic supersonic passenger airplane. Research is like that. At the time, it was a reasonable prospect, and it is unfair to call the decision to undertake this research and development "bad" in light of the result of the research and development. But the Canadian government should have known better when awarding the contract to develop a payroll system because the developer they awarded it to already had a bad track record. A decision should be judged "good" or "bad" according to the information available to the people making the decision at the time they made it.

I have described decisions as being "good" or "bad", but in reality there are many shades of grey. A full analysis of decision making involves <u>probability theory</u>, but I won't get into that here. And I have been talking about money, but the sunk cost fallacy applies more broadly. For example, soon after the start of the Viet Nam war, it became clear to the Americans that the war was unwinnable, as documents declassified 50 years after the end of the war have shown. But getting out would mean that the soldiers who had already lost their lives would have died in vain. So the Americans stayed in the war for 20 years, losing many more lives in vain.

Daniel Kahneman, in his book "Thinking, Fast and Slow", has several amusing examples. One person paid a lot of money for a ticket to a basketball game, and another person was given a free ticket to the same game. When it was time to go to the game, there was a blizzard. The person who paid a lot braved the blizzard and the driving danger, and went; he didn't want to have wasted his money. The one with the free ticket stayed home; he felt that he wouldn't be wasting anything. If they were reasonable people, they would know that at the time of the game, they were in the same situation, and should make the same decision. By that time, how much they had already paid is irrelevant. Apparently, stock investors make a similar mistake; how much they paid for a stock influences what they do next; they call it "protecting their investment".

The sunk cost fallacy is the belief that the money you have already spent justifies spending more, or maybe even requires you to spend more, so that the money already spent is not wasted. The rational behavior is that your current state, including the information that you currently have, determines your course of action; the way you arrived at your current state is irrelevant. What happens in the unknown future does not change the goodness of the decision you make now.

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