Challenges of a Profit Destroying Innovation

All firms should pursue innovation like a holy grail because innovations lead to higher profits and better position for firms. However, in some situations innovations do exactly the opposite. They go rogue.

When innovations go rogue, even if the incumbent firms are able to overcome the challenges of innovation, the incumbent firms face diminished profits or loss of position in the market or both. I have termed such innovations as 'rogue innovations' because they lead to ruin and destruction rather than to glory and success.

Such innovations are rather scary and often firms do not realize that an innovation will go rogue until a lot of investment has already gone into the innovation. At other times it is obvious to firms that an innovation will go rogue. In either situation firms face enormous challenges.

Not very long ago, the pearls sold in the jewelry shops took incredible effort to find. Divers would go in the sea to find pearls and this used to be an expensive operation. It was not that pearls were scattered all over the sea for anyone to go and pick them. As a result, pearls were expensive and the firms who sourced and sold these pearls made good money from the business.

Then, we found that it is possible to create exactly the same pearl in a farm. All one needs to do is to insert a spec of sand into a mollusk and a pearl would form soon. You can imagine what this innovation did to the pearl industry. The industry was devastated because of an abundant supply of pearls. These pearls were no different from other pearls that had to be searched with enormous effort by divers. As a result, prices fell, new competition entered and the incumbents suffered.

This is a classic case of an innovation gone rogue. Even if the major incumbent firms embraced pearl farming to create cultured pearls, they would have seen a significant loss of profits because people didn't buy more pearls to compensate for this loss of profits. If on the other hand these incumbents avoided the innovation, other players would have brought cultured pearls to the market. The result would have been an ever greater loss of profits and market share. You can see how these incumbents were stuck between a rock and a hard place.

It is a nightmarish scenario when innovations go rogue. I have been studying these innovations for many years now and deeply understand this situation.

If I gave you a diamond that looks like a diamond, is chemically same as a diamond, and when you show it to your jeweler he says it is a real diamond will you pay diamond price for it? Next if I tell you that the diamond we are talking about was made in a laboratory will you change you mind?

In the case of cultured pearls, pearls could be produced in a farm. A similar innovation has emerged in the diamond industry too. It is now possible to manufacture a diamond in a laboratory in a short period.

The process involves producing a real diamond that is no different from the diamonds found naturally. The only difference is that instead of letting mother nature takes its course through geological processes to produce a diamond, we can now produce a flawless diamond with exact chemical composition as a natural diamond in a laboratory. Think of it as a way to accelerate the natural process of producing diamonds. Although natural diamonds often have flaws, cultured diamonds are flawless. As a result, a cultured diamonds can be as good or better than natural diamonds. Moreover, even experts find it hard to differentiate a cultured diamond from a natural diamond.

DeBeers controls a majority of diamond supply in the world. Imagine the impact of cultured diamonds. If DeBeers loses control of the diamond supply due to widespread acceptance of cultured diamonds, what do you think will be the effect on diamond industry profits?

This is the challenge of profit destroying innovation.