

## Chapter 63

# Exploring Ethics in Innovation: The Case of High-Fructose Corn Syrup

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### ABSTRACT

*This chapter challenges the view of innovation as synonymous to improvement, which underlies much of the current business paradigm. It debates the presence of the ethical element in innovation processes by presenting the case study of high-fructose corn syrup, a product innovation widely used in the food industry. An argumentative analysis is conducted upon the case, taking into account the perspective of the different stakeholders. The main message of this chapter is that innovations have an inherent ethical dimension and that, for them to serve important societal purposes, it is imperative for the ethical dimension to be considered by different actors in the system.*

### INTRODUCTION

*New practices arise constantly in business for which our moral rules do not clearly give us answers. (De George, 1999).*

The topic of innovation has been increasingly discussed in both corporate and academic circles. The concept of innovation is interdisciplinary and inherently associated with learning and managing knowledge and information (Lundvall, 2004). It was not by chance that the current economic paradigm has relied increasingly upon the learning economy (Lundvall & Nielsen, 2007). In the

learning economy, different agents have access to much more information than ever before, becoming more selective and demanding. As a result, competition has become fiercer and it frequently takes place at a higher technological level. In light of the widespread importance that innovation has achieved, the purpose of this chapter is to promote the discussion of innovations under an ethical point of view.

Because of the paradigm brought about by the learning economy, innovations are, more often than not, seen in a positive manner. On a macro perspective, innovation is commonly associated with economic growth and development. On a

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micro perspective, it is associated with superior financial performance and competitive advantage. Innovation is also sometimes viewed in a purely neutral way, with study devoted to mostly quantifying its occurrence and developing metrics to assess it. In this sense, innovation can become dangerously seen as an end in itself. In spite of the importance and advances brought by these kinds of study, they offer very little about the quality of an innovation, or the purpose it serves in society.

Interestingly enough, even though there is a positive bias towards innovation, the concept is limited by the newness of a subject. The definition of innovation has not typically included any intrinsic moral element. For instance, as defined by Fagerberg: "*Invention is the first occurrence of an idea for a new product or process, while innovation is the first attempt to carry it out into practice*" (Fagerberg, 2005: 4). Perhaps one of the main assumptions behind such a positive perception on innovation is that it is unlikely that anything achieves such a definite state that it does not require any further development. In other words, there is always room for change. And change, as such, ought to lead to some kind of improvement. The first part of this assumption – 'there is always room for change' - sounds reasonable and does not seem to cause any dispute. However, the second part – 'it ought to lead to some kind of improvement' - is open to debate, given cases of innovations that have taken a wrong turn. The financial derivatives that led to the 2008 financial crisis, and the planned obsolescence of what were once durable goods, can be mentioned as a few of these kinds of examples (Soete, 2011).

Relatively recent events call attention to the destructive power of innovation; for instance the diffusion of genetically modified organisms and its many implications on health, regional economics, and the manipulation of life amongst others. Surely, innovation is indeed supposed to disrupt the status quo, or as phrased by Schumpeter, promote

a 'creative destruction' (Schumpeter, 1962). Nonetheless, it is argued that more attention is needed to the destructive portion of Schumpeter's term, as innovations cause adverse impacts of different natures to different actors. Such impacts ought to be balanced, taking into account the values underlying social and economic relations. One might argue that innovation, however, is risky and uncertain by nature. Therefore, it is simply not possible to know in advance all of its implications and who could be adversely impacted by it. Yet, there is always room for adjustments through the developmental course of an innovation. Therefore, if some of its collateral effects are unavoidable, they should then be properly mitigated by those ones responsible for it through accountability mechanisms.

There are still other nuances to the discussion of the positive and negative outcomes of innovations. One of them concerns the purpose versus the practical applications of innovations. It refers to inventions that carried a certain purpose, but turned out to be employed in alternative unanticipated ways, e.g. when the airplane started being used for military purposes. Another nuance to this discussion concerns the perspective of different stakeholders and their power relations. Take, for instance, the development of agricultural machinery and the following displacement of field-workers. Although this technological development faced resistance from the workforce, it is usually perceived as positive because it increased agricultural productivity. Furthermore, even though it eliminated jobs in some areas, others were created at the same time. Now, on the other hand, take a recent innovation: peer-to-peer file sharing technology. The destructive impacts of the P2P technology have also been notably present, particularly the music and film industries, which are still strongly fighting against the negative uses of it. Thus, it can be argued that a common denominator to these events is the resistance to an innovation; still, there is a power imbalance

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