Chapter 20 Business Strategies Incorporating Sustainable Development Principles: Toward an Application of a Function Company

Călin Gurău Montpellier Business School, France

Céline Pascual-Espuny Montpellier Business School, France

Ashok Ranchhod Mudra Institute of Communications, India

ABSTRACT

Sustainable development is considered essential for avoiding a global scale environmental crisis. Using the primary data provided by 68 UK SMEs, this chapter investigates firm managers' level of knowledge regarding the concept and principles of sustainable development, and analyses its impact on the specific sustainability strategies adopted by these firms. The findings indicate a relatively low level of managerial knowledge, as well as a scarce application of sustainability strategies in the investigated SMEs. The results indicate the need to develop management education and best practice examples in order to increase the understanding and the practical application of these concepts.

INTRODUCTION

For thousands of years, humans have exploited the resources of the environment, processing raw materials, consuming food, water and air, and then discharging the residues back into the environment. However, not only humans, but all living organisms are engaged in this cyclical process. The residues are used and recycled by the environment, something serving as food for other species, or being decomposed into their basic elements by natural forces. The planet, as a whole, represents a complex system which is

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capable to regenerate itself, keeping a dynamic balance among various elements.

However, in the last century, the exploitation of natural resources for human benefits has increased its pace and has become more aggressive. This trend was determined, on the one hand, by the rapid growth of world population, and on the other hand, by the increased standard of living, based on high levels of diversified consumption. Today, humanity is on the brink of an ecological crisis that endangers even the existence of life on this planet. This ecological crisis is determined by the quick depletion of the natural resources, as a result of human consumption and activity. In the present conditions of resource exploitation the ecological system of the planet does not have the necessary time to process and recycle the resulting residues. As a response to this crisis, the paradigm of functional economy was recently introduced and developed in order to propose effective solutions for the sustainable development of the society and the economy.

THE FUNCTIONAL ECONOMY

Sustainable development has been defined in many ways, but the most frequently quoted definition is from *Our Common Future*, also known as the Brundtland Report (WCED, 1987):

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

- the concept of needs, in particular the essential needs of the world's poor, to which overriding priority should be given; and
- the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs."

The visionary work of Stahel (1997) has introduced the concept of functional economy. Stahel (1997) defines functional economy as "one that optimizes the use (or function) of goods and services and thus the management of existing wealth (goods, knowledge, and nature). The economic objective of the functional economy is to create the highest possible use value for the longest possible time while consuming as few material resources and energy as possible. This functional economy is therefore considerably more sustainable, or dematerialized, than the present economy, which is focused on production as its principal mean to create wealth and material flow."

Stahel (1997) identifies the main problems of the present ecological crisis, translating them in business and economic concepts: resource-use policies and oversupply. On the other hand, the existing solutions applied to reduce pollution and waste, such as recycling, are not capable to reduce the accelerated flow of resources, preserving the existing logic of the industrial system. In contrast to recycling, Stahel (1997) outline the importance of higher resource efficiency strategies, such as used products take-back operations, or product use optimization. On the other hand, these strategies should be accompanied by a redefinition of companies' and customers' responsibility regarding the use, preservation and disposal of products.

The solutions envisaged by Stahel (1997) represent a paradigm change in terms of production and consumption (see Table 1). The implementation of a sustainable economy is based on reducing the use of natural resources, by increasing the product-life cycle and eliminating the forced obsolescence of products. From this perspective, changing the source of economic value depends upon enhancing product life through several key design strategies that should develop the following product qualities and features:

- durable and difficult to damage;
- modular;
- multi-functional;

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