

# **A Sustainable Environment: Our Obligation to Protect God's Gift**

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## **Servicizing: A Business Model for a Sustainable Environment**

In order to preserve our valuable environment, everyone must be cognizant of what contribution can be made to this initiative. This includes individuals, corporations, governments, and non-government organizations (NGOs). For corporations, there are numerous strategies that can be adopted to lead to a sustainable environment. One such strategy is the conversion from a manufacturing business model to a service model, sometimes called “dematerialization” or by a newer word, “servicizing”.

For many of the manufacturing businesses today, the business model is based on utilizing the natural resources and energy to manufacture a product that provides some useful function to the consumer. With the exception of some warranties, the manufacturer usually has no other obligations for that product. The consumer uses it throughout its useful life and then disposes of it, with the product eventually finding its way to the local landfill, even after some recycling.

Employing the servicizing paradigm, companies can sell the function of the product rather than the product itself, and maintain ownership of the product throughout its useful life. Under such a scenario, the manufacturer would be more inclined not to consider planned obsolescence and manufacture a more durable product. This would result in fewer products manufactured, less resources employed, and less waste created.

A simple example of this business model is in the manufacturing and use of incandescent light bulbs. Manufacturers like Phillips and GE sell light bulbs, through a supply chain, to an end user, such as a school. But the school doesn't really want light bulbs; it wants the function of light bulbs, illumination. So why not sell illumination? This could be accomplished by providing illumination in terms of watts per hour or lumens per hour, or some other measure with the ultimate cost to the school being the same or less.

In the original business model, the sale of light bulbs is a revenue item, and it shows up on the company's profit and loss statement as a sales. In business terminology, it is considered a profit center for the company. By selling illumination, this service becomes the profit center and the light bulb itself becomes a cost center, and thus providing an incentive for the company to reduce that cost. But how? Currently, when a light bulb burns out, it is because the tiny filament in the bulb is broken. The owner of the light bulb throws it out and replaces it with a new one, even though the only thing wrong with it is the tiny filament inside. What if GE or Phillips could manufacture a light bulb where the glass bulb itself could be safely removed and the broken filament replaced? Now the only resource necessary to produce a new light bulb is the tiny

filament and the only waste that was created is the broken filament. The resources needed to produce this new light bulb is probably less than 5% of a whole light bulb and the waste produced is also less than 5% of the original model. Of course, this new reusable bulb would cost a little more to produce, but the ultimate use of resources and creation of waste would be considerably less.

There are other real examples of how this new business model can be implemented. The Ford Motor Company has an assembly plant in England where the cars are painted using product supplied by DuPont. DuPont's objective is to sell as much paint as possible to Ford, as selling paint is how it makes money, i.e. its profit center. A few years ago, Ford management approached the DuPont sales people and asked them to sell Ford a painted car instead of the paint. Upon agreement with this suggestion, DuPont assumed the responsibility for painting the cars, and in providing this service, the paint became a cost item. DuPont then worked on a new formulation to use less paint while meeting Ford's specifications and improved the efficiency of the spray guns in order to create less over-spray and thus less waste. The end result was an improved system, using less paint and at a lower cost, with the savings shared by the two companies.

Interface, one of the largest manufacturer and supplier of commercial carpeting, introduced a new model for providing carpeting to its customers. Instead of selling carpeting, it sold a floor covering service. Its customers pay for the comfort and esthetics of a floor covering and pay for it on a monthly or yearly basis. Interface manufactures the carpeting in the form of tiles, usually two feet by two feet, and after it is installed, the company provides a service to maintain it. After all, the carpeting itself belongs to Interface, not the customer. Since the carpeting wears out in the major traffic areas and not along walls or under tables, only the worn carpet tiles need to be replaced. The old carpeting is returned to the manufacturing facility, separated into its original component and recycled to produce new carpeting. With this business model, less carpeting is produced and much less is disposed of in the landfills. Again, less natural resources and energy are required for this business model.

This business strategy and others, to be presented in future commentaries, should be adopted by companies wherever possible. Only in this manner can we strive for a more sustainable environment.