This paper concerns new business models, required for de-growth and the steady state economy.

This paper responds to a gap in research and practice. There is a tension between economic growth and planetary limits. Infinite economic growth is neither desirable nor possible; requiring de-growth, and ultimately, as steady-state economy within planetary limits. But steady-state researchers are usually silent about the implications at individual organization level of such an economy: what does the de-growth imperative mean for individual businesses? On the other hand, the discipline of “sustainable business” taught in business schools aims to reduce the environmental impacts of individual private sector organizations; or how to conduct business as usual, but more responsibly. It is completely inadequate, in that it does not incorporate planetary limits into its analysis. As such, it ignores the critical fact that businesses cannot all pursue growth strategies, when we know we need to de-grow overall.

A focus on the private sector is critical; because it is the purpose and structure of the private sector have created conditions of unsustainability. Businesses are organizations that have create something value, and have developed models to sell this value to their customers, in a way as to be worth the while of their owners. Businesses create value “ by meeting customer needs” through new or improved products and services. In short, businesses are in the business of creating new stuff and successfully commercializing it. While creating new stuff, or invention, does not necessarily happen within private sector organizations, businesses are the actors that commercialize these new products and services. Commercialization enables their diffusion, and this diffusion shapes our lifestyles. Therefore, business can be viewed as the process by which more products are brought into the world, using more materials and energy.

This is in direct tension with the requirements of de-growth, which requires a reduction in material and energy throughput.

If the private sector has created unsustainability, we need to imagine a new private sector that would innovate for sustainability. I argue that business can innovate for sustainability by creating “frugal value”. “Frugal value” has two components. First of all, in a state of de-growth, businesses need to create value to their customers by offering products that have two critical attributes: efficiency and sufficiency. That is to say, business will offer products that are efficient in their resource use and minimizing of pollution impacts, and products that contribute to reduced resource use overall. I call these types of products and services “frugal products”, and the lifestyles they shape “frugal lifestyles”. The challenge to business is not only to deliver better products, but ultimately fewer products. There is a second, further challenge: in the state of de-growth, businesses need to find ways to make such efficient and sufficient products commercially viable. I argue that that they do this by developing business models that require and drive frugal products and services. I identify four such models.

The first model concerns the resizing of product creation and retail, or the shrinking of the manufacturing and retail sector. This requires a shift away from models based on the creation and retail of a high-volume of frequently replaced products to the creation and retail of frugal products. This means the discontinuation of some products in a process of choice editing, creation and retail of more desirable ones, and reduced volume of products overall. This model requires a shift away from revenue based on product sales, to one based on sales complemented with additional options, to create alternative revenue streams.

The second model concerns a shift from ownership to access. This require a shift away from models based on product sales, to ones based on product rental; a shift from revenue from sales to revenue from rentals, membership, subscription.

This model drives frugal products in a number of ways. In particular, as businesses retain the ownership of products as assets, the onus is on them to own durable, well-maintained products. Products are used by multiple users, and the greater their use-intensity, the greater the business revenue

The third model concerns calibrating the mix of products and services, replacing products with a service or a product service, if there are environmental benefits to this shift- that is to say, the tools required for the service are more frugal than the product they replace. Revenues no longer come from sales, but from a service fee. A product service model concerns rental of the benefits derived from a product, rather than simple rental of the product. To make sure benefits are continuously derived, businesses take on maintenance, and upgrade services- again, driving product durability and efficiency.

The fourth model concerns catalyzing household activity. This model is a shift from “business doing business”- manufacture, retail, rental- to businesses acting as an introduction agency for households doing this same work. Revenues come from a commission for the introduction. This is the so-called peer-2-peer economy, collaborative consumption or the sharing economy. These types of businesses drive frugal products in a number of ways, including reducing the number of artifacts required overall, while retaining product benefits amongst multiple users. This kind of activity may also reduce the social significance of products, by shifting social meaning to online peer feedback platforms and away from conspicuous consumption.

These four models already exist. In the car industry for example, there is a mixture of private ownership of cars designed for fuel efficiency, rentals, chauffeur driven cars providing the service of mobility, repair services, and peer-2-peer rentals. We don’t, however, have a sustainable automobile industry! Is it therefore clear that the questions of appropriate mix of different models for different sectors and overall size of different sectors need to be considered. Moreover, while we have plurality of models, what we have by in large is uniformity of organizations. They are profit-making, limited companies, usually owned by people outside of the organization. This structure is incidental- it is not necessarily the most appropriate structure for the four models described.

This paper concludes that appropriate design of organizational structure is an integral part of frugal value. This includes consideration of ownership, scale, appropriate profit, and the added value of a commercial basis.

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