World Economic Forum Young Global Leaders Taskforce

Circular Economy Innovation & New Business Models Initiative

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Circular Economy – The Key Is The Business Model

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Since the Industrial Revolution humanity's use of natural resources has been basically the same: take - make - throw away. The World Bank's predictions for global waste generation are chastening: on current trends it will double between now and 2025 to 6.5 million tons of solid waste every day. For sure, we have got better at using virgin resources more efficiently while second-hand markets and recycling rates have both improved. But this hasn't altered the fundamentals. Many companies' business models are not set up to do much else than earn money from volume. The fact that few businesses are vertically integrated makes it more difficult for businesses to reform the model for "closed" product loops even if their CEOs want to.

When you add to this the OECD's estimate of an extra two billion middle class consumers before 2030, commodity price volatility and new environmental regulations, you start to see the scale of the challenge. The good news though is that circular economy thinking can make business-sense.

It often requires product vendors to think of the resources in their products as assets rather than inputs and their customers as **users** rather than **buyers**. The question then becomes how to maximise value along the chain and – crucially – how to enable the assets to be continually re-introduced to markets. Once a material is seen as an investment and customers as users, one appreciates how little business-sense it makes to discard product assets after only a few months instead of maintaining the customer relationship **during** multiple cycles.

Of course, this "Circular" thinking may be easier said than done. Here are five fundamental considerations for nearly every sector:

- How can we design our products with asset recovery in mind?
- How can we develop product lines to meet demand without wasting assets?

- How can we source material in regenerative loops rather than linear flows?
- How can we develop a revenue model that protects value up and down the chain, and
- How can we get our customers to cooperate with us?

Complex organisations with multiple stakeholders and relationships with customers that are generally 'point-of-sale' may need to change their mind set and think of themselves as service providers.

We have identified five business models that are contributing to making Circular businesses a reality:

- 1) products as services,
- 2) next life sales,
- 3) product transformation,
- 4) recycling 2.0 and
- 5) collaborative consumption.

In products as services, goods vendors embrace the idea of themselves as service providers: leasing access to and not selling ownership of a service. In some cases this has led not only to an effective hedge against cost volatility but also to a 'stickier' customer relationship and increased upsell. Vodafone's Red-Hot plan is a good example. You can rent the latest phone for a year and keep on exchanging it for a newer version. "Assuming Vodafone is engaged in collecting the old phone, not only does this act as material collection and pooling but from a business standpoint also creates deeper customer relationships"

Next life materials and products work when a company can efficiently recover and re-condition its products after use and then put the same products into the market to earn a 2nd or 3rd income. Tata Motors Assured is a good example here. It's more than a second hand car dealership. Cars are handpicked and refurbished in Tata workshops and then undergo a certification process. Customers are even offered financing options and warranty.

Not all products can be reconditioned in their entirety but most products have certain components that carry a high value. Not just products, but often materials themselves have an embedded energy component that makes them even move valuable then their virgin source. With the right design and remanufacturing capabilities, they can be put together to form new products. This is **Product Transformation**. For BMW, it can mean a 50% cost saving for customers buying remanufactured parts as compared to new ones. You get exactly the same quality specifications as a new BMW part subject to the same 24-month warranty.

Not to be forgotten is that innovation in recycling technology (Recycling 2.0) is rapidly evolving and enabling production of high-quality products with fantastic sustainability performance. Starbucks, for example, is actually aiming to turn thousands of tons of its waste coffee grounds and food into everyday products by using bacteria to generate succinic acid which can then be used in a range of products from detergents to bio-plastics and medicines.

Lastly, social media exchange platforms are rapidly transforming industries by **collaborative consumption. Airbnb** (the online service that matches people seeking vacation rentals with hosts who have space) now has over 200,000 listings in 26,000 cities. Check out THREDUP the next time you need new clothes for your kids – you can browse like-new clothing at significant reductions from families whose children have outgrown their old clothes.

Of course, moving to a truly Circular Economy could require a mixture of all these five business models and a great deal of product and service innovation. Consumers and policymakers have a central role too. But what these business models demonstrate is that it is possible to rethink how we make and use things. The companies that are starting now may well define the future of sustainable business, enabling global prosperity on a crowded planet with finite resources.

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The vision of this YGL taskforce is to create a socially and environmentally prosperous world where profitable businesses provide smart goods and services within the resource limits of the planet.

Our mission is to inspire leaders to embrace the "Circular Economy" business philosophy for their organizations and provide tangible examples of successful business models and means of implementation.

By advancing this mission the taskforce helps create universal awareness amongst business leaders and other stakeholders of the inherent problem of unsustainable – linear – production methods; the case for and possibility of change; the business opportunities; and means of transitioning to a sustainable global economy.

This piece draws on both Accenture's client experience, David's experience as a practitioner, and the activities of the WEF YGL Taskforce over the last year.

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