

CIRCULAR ECONOMY IN PRACTICE:

Circular Business Models

The circular economy presents an entirely new way of doing business. Therefore, business models that thrive in a linear system must be adapted or entirely changed to support the circular economy. Circular economy business models emphasise selling higher quality products, allowing customers access to products as services, keeping existing materials, components and products in use, and greater collaboration across the supply chain ^[1]. The major distinction between linear and circular business models is that whereas linear models tend to prioritise selling more units of products, circular models focus more on service over product.

Barriers company's face in adopting circular business models:

- Lack of capital
- Lack of government support / effective legislation
- Administrative burden
- Lack of technical and technological know how
- Lack of support from the supply and demand network

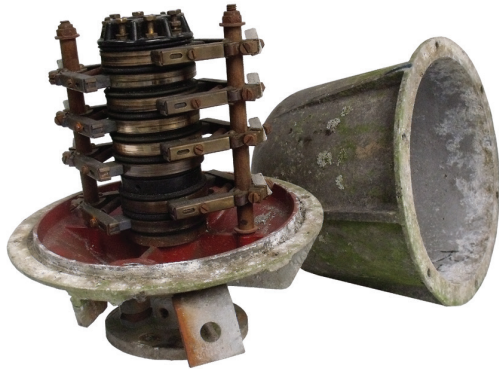
According to the UK's Waste and Resources Action Programme (WRAP) ^[2], circular business models include:

- Product service system (PPS): A product-as-a-service model offers users the function that a product provides rather than ownership of the product. There is an emphasis on providing quality service in addition to products, for example, by providing repair services. This approach influences the design process as products are designed to be durable, re-useable and bio-compatible with the environment.
- Dematerialised services: providing a service that offers product benefits and where the 'physical' product may not even exist. Examples include streaming services like Netflix, Spotify.



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*20+ year old BGB SPB01
Wastewater unit sent to BGB for
repair*



*SPB01 unit after being
refurbished*

- Hire and leasing: offering leasing services as an alternative to purchasing and owning a product.
- Collaborative consumption- Systems that enable people and businesses to share products and services. Examples include accommodation rentals, car sharing and bike sharing.
- Incentivised return and reuse: customers are encouraged to return used items for an agreed value. Collected products are refurbished or remanufactured and sold for reuse.
- Product life extension: products are designed to be durable and last long. In some cases, repair services are offered. This approach goes against the popular practice of planned obsolescence and can reinforce an organisation's image and reputation.

Another business model worth mentioning, especially because it relates to BGB's industry, is resource recovery ^[3]. This model leverages technology to recover materials and reuse products and components to eliminate material leakages whilst maximising economic value. The goal is to convert 'waste' into secondary raw materials through practices such as closed-loop recycling, cradle-to-cradle designs and industrial symbiosis ^[4].

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Some researchers report a gradual transition to the circular economy approach in the real business world. The adoption of the circular economy approach by these businesses is driven by the realisation that the linear model makes their businesses vulnerable to price increases and other weaknesses in the supply of raw materials and energy, as well as the threat of exhaustion of resources in the foreseeable future, climate change and its consequences^[5]. Some of the benefits of circular business models include:

- **Creating new markets**

The circular economy approach enables innovative businesses to reduce material costs and develop completely new markets where profits are made. Circularity also offers new profit opportunities through lower cost of resources and a more robust supply chain. For example, Where a business can find ways to convert waste into income streams, it can make profits from resources that would ordinarily have been disposed of under the linear model.

- **Competitive advantage**

Adopting the circular approach ensures a company maximises the value of raw materials over its entire life cycle, this results in relatively lower material costs, more stable material supply, and ultimately, a more stable business model. This can give the business an edge over competitors who are still implementing the linear model which is influenced by the price volatility of raw materials and supply shocks. Competitive advantage can also come from the ability to satisfy the growing demand for services within the circular economy.

- **Optimised customer relations**

Circular business models create opportunities to retain customers. The Product-As-A-Service system creates a long-term relationship between customers/clients and suppliers because there is more contact during the life of the product. This not only results in customer satisfaction but also in customer loyalty.

Circular business models enable an organisation to meet its environmental goals and targets.

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Despite the benefits of the circular economy, only about 9% of the world is circular^[6]. This may be due to barriers that businesses face in adopting circular business models. Many of the barriers affect both larger and smaller enterprises to different extents, however, small and medium-sized enterprises are a bit more disadvantaged due to their size and limited research and development capabilities.

Some of these barriers are listed below:

- **Lack of capital**

Shifting from a linear to a circular production model requires a substantial amount of time and investment. Implementing a circular economy business model demands continuous monitoring and improvement of the product's lifecycle; hence, a significant amount of resources would be needed to keep all parties committed. The level of costs is particularly important for SMEs as they are more sensitive to additional costs resulting from green initiatives.

- **Lack of government support/effective legislation**

Government support can take the form of the provision of funding opportunities, training, effective taxation policy and laws and regulations that support integrating circular solutions in operations. Where government support is lacking, it is more difficult for SMEs to adopt circular business models.

- **Administrative burden**

Adopting a circular business model can entail more complex and costly management and planning processes, such as the process of gaining industry standard approval, as well as monitoring and reporting environmental performance data.



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• Lack of technical and technological know-how

Linear technologies are widely established in current business practices, transitioning to a circular economy business model would require new sustainable production and consumption technology in the fields of circular design, clean production, and life cycle assessment. Lack of technical know-how may result in SMEs adopting linear technologies and business models they are familiar with and depending on their suppliers' suggestions for innovative technical solutions.

• Lack of support from the supply and demand network

Adopting a circular economy business model is likely to increase complexity throughout the supply chain, so successful implementation requires the collaboration of all parties across the supply chain. The transition to a circular economy necessitates a shift in consumers' lifestyles and behaviour. Thus, where suppliers, service partners and clients are reluctant to get involved in innovative circular economy processes, it becomes harder for businesses to make the transition.

Implementing the circular economy approach can create lasting environmental, economic and business benefits. Although the benefits are immense, the barriers businesses face in going circular have contributed to slowing down widespread adoption.

Governments and regulatory bodies have a big role to play in eliminating many of these barriers. Consumers are also an important piece of the puzzle. By educating themselves about the circular economy and the implications it can have for us and future generations, and altering their demand accordingly, consumers can push businesses to reassess their business models and go circular. Finally, businesses themselves have to be willing to step outside their comfort zone and take concrete steps to transition to the circular economy.



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[6] The Circularity Gap Report

BGB Author:

UCHE UGWU

Mar22

E: education@bgbinnovation.com



@bgb_innovation