

E book

# The 5 success factors of a circular business model

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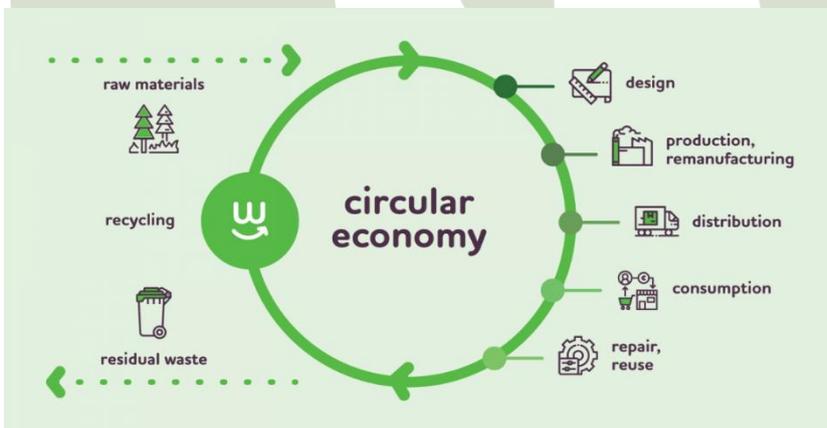


## The 5 success factors of circular business model

Many companies are working on sustainability or circular economy, but how do you build a good business model? A well implemented circular business model has the right incentives, is attractive for your customers and for other companies in your circular value chain. In this e book I guide you in providing the 5 success factors for a successful circular business model.

### *What is circular economy?*

Let's start by explaining what the circular economy is and why it is important to strive for. In today's economy, we use some products only once or several times and then throw them away. Producing the product has already produced the necessary CO<sub>2</sub> emissions, and again by transporting the product to the location where you bought it. After using it and after you throw your product away, CO<sub>2</sub> emissions again are emitted to burn it and get rid of it. In addition, it is a waste to burn valuable materials when we can find a great new use for them. When we burn products in the current way, we assume that we have infinite access to new materials. But that is not the case. Raw materials are becoming scarcer. Everything you see around you has a natural origin. The chair you sit on may be made of wood or metal, your desk, your computer, everything has materials that once came from nature. These raw materials often cannot be replenished by nature. Wood can, but only if enough trees are planted to keep the balance. This is not the case now. We consume more than the earth can regenerate. This is especially true in the prosperous countries of the world. The consumption of so many raw materials in combination with the high CO<sub>2</sub> emissions brings the earth out of balance. We see the signs of this imbalance in more extreme weather - think of great droughts or heavy rainfall. Think also of a rising average temperature resulting in a rising sea level, among other things. In short, we want to build a circular economy to preserve our planet and keep it liveable. Worldwide, we use only 9% of recycled materials as input for our value chains.



To build the circular economy, we need to change our behaviour and structure of our value chains. Thus, we do not want to throw away raw materials at the end of their life, but reuse or recycle them. In the latter situation, we want to be able to reuse the raw materials to make new products. Our current linear value chain (where you throw

away products at the end) is sometimes quite complex and globally organised. This does not make it easy to change. Within the circular value chain, we need to start asking each other different questions, such as whether recycled raw materials have been used, and we need to rethink our product design so that it is easier to repair. We have to break rooted patterns and our own behaviour!

## Vision and strategy

The change from a linear to a circular business model starts with a vision and strategy. What do you want to achieve? Possibly the Sustainable Development Goals (SDGs) can support you in this. Many companies choose some of the 17 UN goals to focus and make choices that are close to their own businesses. If you focus on the circular

# SUSTAINABLE DEVELOPMENT GOALS



economy, your contribution can still be on several SDGs. Focus on energy consumption (SDG7), raw materials and responsible consumption and production (SDG12), but also liveable cities (less waste) (SDG11) or a liveable sea (less plastic in the ocean) (SDG14) can be in your scope if you want to move towards a circular strategy. The SDGs are strongly related to each other by combining it with SDG17, partnerships. After all, nobody can change the world alone.

Once you have chosen one or more SDGs to focus on, determine how your company can contribute to them. And it helps to think big and far away, so you don't see the bears on the road just yet. What would your goal be for 2050, 2040? Back to the strategic course for the coming years, what is the low hanging fruit (short-term goals) and what needs to be set in motion today in terms of large-scale changes to achieve them in the long term? A combination of short-term and long-term goals will ensure that you can celebrate successes quickly and, at the same time, achieve real systemic change over time.

## Circular business model

One of those short-term goals in your business strategy may be to experiment with circular business models. A circular business model is a model in which the principles of the circular economy are applied. Circular principles relate to longer product life cycles, modular products made of high quality materials, easy to repair products or easy to recycle products. The circular economy is not only about product-related companies, but also applies to service companies. Focus on the needs of the customer to design your circular business model. In a circular business model, you could look at the need to sit rather than the need to buy a chair. Or the need to light a room, rather than owning a beautiful light fixture. This different view of customer needs requires a change in cooperation with customers and suppliers and, for example, the exchange of data in the value chain to apply the corresponding (and changing) earning models. When selling a chair or a light fitting, you'll have only one transaction between supplier and customer. Hardly any data needs to be exchanged here. There is only one amount to be paid, the total sales amount. When you choose to apply a product-as-a-service model, a long-term relationship is established between supplier and customer. Often, a supplier remains the owner of the product and the customer pays for the actual use of the product on a usage or monthly basis (or a combination). To know what the usage is, data must be linked back to the supplier to determine the correct invoice amount. For the customer, this model can be attractive when it is an expensive product and therefore does not have to pay the high price or when the customer only needs it for a limited period of time. The supplier has the incentive to deliver high quality products, because it only gets paid if the product works and is used. Moreover, after the first customer has used the

product, it can also be used for a second or third customer, to create the business model also financially more viable. By retaining ownership of the product, suppliers can have the product recycled at the end of its life cycle. The recycled materials can be used as input for new products. Then we will have realised the optimal closed value circle of the circular economy.

#### *Example from linear to circular business model*

Let's introduce an ambitious coffee machine supplier, which supplies an important product in an average household. This entrepreneur aims to provide his customers with an as-a-service business model. How will he start this transition?

The important first question I would ask is why he wants to introduce this business model. If it is only to achieve a higher profit margin, more intensive customer contact or continuity of cash flow, such a business model cannot be called circular. A circular business model is anchored in a sustainable business strategy of a company. This is essential if a company wants to achieve sustainable impact in the long run and also wants to invest in this. Within that strategy, it makes sense to shape sustainable or circular business models to realise sustainable impact as a company with your customers. A sustainable business model can appear in many forms. With a circular business model, you try (in its most extensive form) to close a value chain and extend the life span of products. That is what we focus on in this article.



Back to this ambitious coffee machine supplier. In shaping its sustainable strategy, the company realises that the machines have a lot of materials of high value. The products will be designed to be more modular, to make them easier to repair and will be equipped with technological features. This will enable exchanging data on customers' usage and will give tips on correct use and extend the product's lifetime. Moreover, they are often expensive devices, which makes them well-suited to an as-a-service concept. A good as-a-service concept often requires the exchange of data, and if you pay per cup of coffee, the owner wants to know how many cups were purchased. This is then linked to a financial process. For maximum convenience of the customer, the manufacturer cooperates with a producer of high quality sustainable coffee beans. By exchanging data on the number of cups of coffee, the average consumption of the machine per cup and the number of beans, the partner company can prepare a new delivery before the coffee beans run out. This too can be designed into a monthly fee. Data exchange between the partners is then necessary to provide the joint high service level.

For the design of a successful circular business model, we walk you through the 5 success factors.

#### 1. Needs of the end customer

In a circular business model, the focus is not on the product, but on the needs of the customer. In the example of a coffee machine, the customer's need is to enjoy good coffee at home or at the office. You could add the convenience of having the right beans, choosing the right grind for the coffee beans and the maintenance of the product between cups of coffee. The manufacturer has already developed an app that the customer can connect to his machine. With it, the manufacturer can coach the customer

in choosing and evaluating the coffee. Is it tasty, is the milk not of the right strength or is there something else that is not to the customer's favour? Then the app can give indications about the water temperature, the setting of the coarseness of grind or suggestions. Convenience for the customer is key. A coffee machine is a luxury device, so the price can be a point of discouragement for the customer to buy the product. When the manufacturer retains ownership of the products, he can offer an as-a-service product to a new customer group.

## 2. Sustainable behaviour

For each product you can think of different sustainable behaviour. A coffee machine consumes electricity, so you don't want to consume power unnecessarily. Moreover, you don't want any waste; with the app mentioned earlier, you can increase the success of a good cup of coffee by coaching the customer, and thus the customer's pleasure. Furthermore, you always want to prevent waste with food products, by thinking about the correct use of the coffee beans. You can also support this with the app and the correct use of the coffee machine. The producer could choose to offer the as-a-service concept together with the energy consumption. This gives the producer the incentive to develop a device that consumes as little energy as possible. An all-inclusive tariff should measure the operating time of the device and the corresponding energy consumption. With an as-a-service concept, you want the device to last as long as possible. The customer then only pays if the product actually works. To achieve this, it is necessary for information to be exchanged between the producer and the customer, so that the long service life can be achieved and the need for maintenance can be identified at an early stage.

## 3. Positive reward

In a circular business model, you want to reward sustainable behaviour. The service life of a coffee machine can be extended considerably if it is thoroughly cleaned on a regular basis. This is a function of the machine and takes about 10 minutes. You could say that it is a bit of a hassle for the customer to do this. You can also reward the customer for performing the maintenance actions, by giving a discount on the use or on the next delivery of coffee beans. Then you have an incentive to generate the same interest.

## 4. Network

To build the service machine that demands a care-free as-a-service concept, you want to be able to



rely on a network of manufacturers and service providers who can deliver what you promise. If the machine does break down (which you prefer to prevent by using sensors to detect wear and tear at an early stage), you want a service technician to be on site quickly to repair or replace the coffee machine. You can also choose to have the machine exchanged at a central location. In both situations, the manufacturer will work with partners to provide this service. The

manufacturer of coffee beans has already been mentioned, where the beans are delivered before they are actually used up. Special coffee milk or other consumables can also be added to this concept. Furthermore, due to the exchange of data, a strong IT component is relevant for the proper functioning of this model. Expertise may also be needed here in order to properly implement a circular business model.

## 5. Intensive customer relationship

A customer wants convenience, wants to see his needs met, is willing to exchange data and does not want to make too much effort to communicate. After all, it simply wants a good quality cup of coffee. To make this service possible with an as-a-service concept, a smoothly running system is therefore important. On the other hand, you will have a more intensive customer relationship with your customers than if you were only selling your products as a manufacturer. That is an aspect you have to set up your organisation for.



For a successful circular business model, you have to set up and design many aspects. However, there are important advantages to this model. One of the aspects is that you learn a lot about the use of your coffee machines, which enables you to continuously improve the product and adapt it even better to the needs and use of your customers. By striving for low energy consumption and high up-time, you provide clear direction to the product development team. Because of the intensive customer relationship, you will also receive faster feedback if the product does not function (correctly). When the product is no longer needed, you can easily take it back. The customer can indicate that, so you have control over returns. As a manufacturer, you can take these products back, refurbish them and put them back on the market as a nearly new product. In that way, you save on production costs and build a financially healthy business model. If the products really can no longer be used for customer purposes, you can dismantle them and use them for new production. This saves the purchase of new raw materials for future production rounds. You are therefore in control of an important part of the chain yourself.

These last aspects are important for a financially viable circular business model. In the end, only that is truly sustainable. Keep in mind that the payback time of a circular business model may be longer, but it is much more durable. The development time is longer, but in the long run - certainly with rising raw material prices - you have continuity and financial savings to achieve. A truly future-proof business model, therefore. Good luck!

*This e-book was written by Diane Zandee, expert in sustainability, circular economy & finance. Diane researches the circular economy at Nyenrode Business University and has broad experience in the business world in senior management positions, including Eneco, NS and Schiphol Airport. She works as a consultant from FinChain Consulting in cooperation with various partners on making companies more sustainable and companies in transition. Do you want to explore how you can shape your sustainable journey? Feel free to contact us via [diane.zandee@finchainconsulting.com](mailto:diane.zandee@finchainconsulting.com).*