



# **As-A-Service & Circular Economy**

## **5 steps to unlocking circular economy with As-A-Service**

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## Introduction

More and more people are realising the benefits that a circular economy model brings to an organization. There are several ways to initiate a circular business model.

One of the most innovative opportunities is **As-A-Service**, an effective and productive way to build sustainability across the organization's operations while creating wealth for stakeholders and shareholders. This paper is written predominantly from the perspective of manufacturers and/or integrators.

This white paper focuses on five ways to initiate circular economy with **As-A-Service**:

- The Life Cycle Assessment (LCA)
- A holistic approach across the value chain
- Understanding product's identity
- Empowering people
- Connect with Black Winch

This white paper is the last in a series of four papers. The first provides an overview of how to connect the dots between the **As-A-Service** business model and circular economy, the second focuses on planned obsolescence, and the third analyzes common mistakes made when connecting the **As-A-Service** model and circular economy.

## 1. Life Cycle Assessment

Sustainability is constantly being discussed in the news. It is about making a decision that takes into account both the economic objectives of the organization and the consequences of that decision on our planet. For action to be effective, **three conditions** must be met:

- Technological solutions must be available.
- The different solutions must be prioritized and selected taking into account environmental efficiency, costs and economic constraints.
- Activities and actions must be optimized to reduce impacts through continuous improvement.

Life Cycle Assessment (LCA) is a decision-making tool which addresses the prioritization of solutions to a problem. It is relevant from a sustainability perspective because it analyzes the entire life cycle of a product or service while ensuring that a change in action does not move the environmental impact elsewhere. This tool is paramount in creating good economical models, especially if the manufacturer or integrator wishes to move towards circular economy via an **As-A-Service** business model. LCA can be compared to a full cost economic accounting of a product (both financial and environmental). This tool is governed by the ISO 14040:2006 standard which contributes to the 13th Sustainable Development Goal of the United Nations: the fight against climate change.

In addition to economic value, sustainable business models integrate the value for the people and the planet, which are often called the three pillars of sustainability or **the triple bottom line**. This concept implies that organizations should measure their social and environmental impacts in addition to their financial performance.

In a linear business model, the weakness of the life cycle assessment is that only assumptions are made about the end of life based on statistics. The end user is responsible for the end of life so even if a product can be recycled, it might just end up in a landfill and its components will be wasted. In a circular business model like **As-A-Service**, the responsibility of the end of life is in the hands of the manufacturer or integrator. It means better **control** of the economic and environmental consequences of the end of life on top of the advantages of retrieving the components and raw materials.

## 2. A holistic approach across the value chain

A manufacturer or integrator that wants to capitalize on the **transformational power** of circular economy must work circularity across four dimensions:

- Operations: addressing the value lost through operations and the by-products of business activities and processes (emissions, excess use of energy or water, waste, etc.).
- Culture & organization: integrating circularity principles into the organization's core business culture through work practices, procedures and policies.



- Products & services: eco-design, LCA and other tools can be used to optimize the production and use of products.
- Ecosystem: through collaboration and partnership with public and private actors for a collective circular transformation.

Collaboration, strategic orientation, political context and culture are critical key factors for the success of the realization of a sustainable value chain.

Using a circular business model, like **As-A-Service**, as a framework for success is a good way to achieve substantial economic and environmental success. The manufacturer or integrator creates long-term partnerships with strategic players because it centralizes all the service offers around the product and therefore has a power linked to the volume of purchases it represents. For example, a car rental company with a fleet of 500,000 cars may have a strong impact on the environmental standards it imposes on its tire suppliers. This positions them as a **leader** in its ecosystem. That is, they can enforce environmental concerns and the circular economy across their ecosystem and their value chain on a large scale.

### 3. Understanding product's identity

Product identity can be compared to the personality of a product as users tend to describe their products with the same adjectives as for people, for example: reliable, elegant, solid, etc. In particular, product design plays an important role in the impression users have of products. It depends on aesthetics as well as meaning-making experiences.

Linking product identity to sustainability by developing the product design cannot work without an incentive by the top management to do so among the different departments involved, not only at the design or marketing level. Organizational support is needed to include sustainability concerns within the activities.

Social practices are an interesting approach to analyze the dynamics of use and consumption, it is also a relevant starting point in supporting change towards circular economy through design. Waste is associated with the **identity loss** of a product by Dutch architect Thomas Rau. For example, when a user buys a new smartphone, his previous one loses all value in his mind whether the product still works or not. The product needs to acquire a new value. This old smartphone can have a "new smartphone" value to another user or a "raw material source" value to the manufacturer or integrator. **As-A-Service** makes it possible to keep the responsibility for the continuity of the identity of the device at the end of each use cycle with the manufacturer or integrator.

## 4. Empowering people

The positive point and advantage of sustainable development is the ethical and psychological value it adds to the product for users. If not for financial concerns, customers want to be more sustainable in the way they consume. Users have the power to engage companies in more sustainable markets if they are aware of alternative choices, including the ability to purchase the service rather than the product itself. Sustainable development is often associated with a business case, as if it must be associated with financial gains. However, to have a truly good impact on the planet, we must do what is necessary and think about the real long-term consequences of our actions. The business model **As-A-Service** offers a **balance** between economical and environmental concerns. Circular economy aims at reducing the extraction of raw materials and the creation of waste.



Empowering people also means ensuring that everyone in the organization understands the new sustainability goals and ambitions. Depending on the structure and the size of the company, training, meetings, etc. should be arranged. Employees involved in organizational changes contribute more than those who have had the changes imposed on them. When employees understand the importance of the change and why it needs to happen, they don't just accept the change, they actively participate in its success.

In a B2B business model, empowering stakeholders includes engaging customers in **eco-design**, co-creation and reverse logistics. Practical rewards and incentives can be used to motivate them. Engaging business partners in the new actions and ambitions is crucial to the success of the shift to circular economy. Processes can be put in place such as data collection tools to better listen to users and better evaluate the performance of products and services. Recycling partnerships can be created to ensure a proper end of life of the product. Implementing a new circular business model takes time, but in the long run it will develop new partnerships and opportunities.

We often associate the fact that a so-called sustainable investment has to be justified by a business case, whereas non-sustainable investments are not as often and as strictly subject to an ROI objective. As-A-Service helps to demonstrate the economic benefits of a new solution as the business case is much easier to demonstrate in a monthly fee based offer.

## 5. Connect with Black Winch

Black Winch supports organizations to create and/or improve their **As-A-Service** business model according to their objectives: feasibility analysis, improving profitability, securing the market share, improving customer loyalty. Moreover, the Black Winch experts will participate in initiating circular economy in your organization's strategy and activities. By turning and developing the product-based linear business model into an **in-house subscription model**, it will bring value to the end users, the stakeholders and the shareholders.

The Black Winch experts help organizations to develop a successful **As-A-Service** business model through a proven methodology. With a **personalized framework**, Black Winch helps to build or adapt an **As-A-Service** offer, find financial partners, bring employees on board, train teams, and provide the financial engineering required to ensure the success of the project. Additionally, it opens the door towards circular economy and sustainable development by reducing the pressure on the environment and the creation of waste. Black Winch is proud to be part of the [Ellen Macarthur Foundation](#) community.

Are you ready to move your business towards the **As-A-Service** model and circular economy? Contact [info@blackwinch.eu](mailto:info@blackwinch.eu)

## Bibliography

- Antikainen, M., Heikkila, J., Knuutila, H., Nurmi, P., Petanen, P., & Heikkila, P. (2020). Sustainable circular economy value propositions in clothing as a service -model. The ISPIM Innovation Conference – Innovating in Times of Crisis. LUT Scientific and Expertise Publications: ISBN 978-952-335-466-1.  
Elffers, D. (2014, March 14). *A guide to implementing the circular economy in your business*. Retrieved from The Guardian: <https://www.theguardian.com/sustainable-business/how-to-implement-circular-economy-business>
- Jolliet, O., Saadé-Sbeih, M., Shaked, S., Jolliet, A., & Crettaz, P. (2016). *Environmental Life Cycle Assessment*. CRC Press.  
Lacy, P., Spindler, W., & Long, J. (2020, January 20). *How can businesses accelerate the transition to a circular economy?*. Retrieved from World Economic Forum: <https://www.weforum.org/agenda/2020/01/how-can-we-accelerate-the-transition-to-a-circular-economy/>
- Stahel, W. R. (2006). *The Performance Economy, 2nd edition*. Palgrave Macmillan, DOI 10.1057/9780230288843.  
Warell, A. (2015). *Identity references in product design:An approach for inter-relating visual product experience and brand value representation*. *6th International Conference on Applied Human Factors and Ergonomics (AHFE 2015) and the Affiliated Conferences, AHFE 2015* (pp. 2118-2125). Elsevier, doi: 10.1016/j.promfg.2015.07.350.