

Area of interest Online trade in mountain bikes.

About the company Subito is part of Schibsted Media Group, a Norwegian multinational founded in 1839 that operates successfully in 27 countries in publishing (newspapers and the printed press), online (classified ad sites and digital services) and mobile markets. Most of the products sold through the platform have already been used at least once and this supports the strategy of extending product life (re-use) within the context of the circular economy.

Relevant business model

Sustainable inputs	End of life	Life Extension	Sharing platforms	Product as service
--------------------	-------------	-----------------------	-------------------	--------------------

Business requirement and proposed solution

A total of 45,310 mountain bikes (MTBs) were sold on Subito between 1 July 2016 and 30 June 2017. It is important to point out, for reasons of transparency in the interpretation of the circularity measurements, that the total number of purchases is an aggregate figure: neither the specific motivations that led users to make the sale/purchase, nor the duration of use of each MTB before the sale are known. Generally, there are two main motivations for the sale of MTBs: the purchase of a newer, better performing model, or that the bike is no longer used. It is therefore possible to contextualize the sale and purchase of MTBs as an expression of the concept of the circular economy in that it relates to the extension of the useful life of a product, with consequent savings of natural resources.

Selected solution and details

To collect the data necessary for calculating the circularity of used and saved resources, ten different models of medium size MTBs with aluminium frames were considered. Subsequently, the composition of the main components was analysed and the average weight of the MTB and the different elements was calculated.

Overall, the purchase and sale of 45,310 MTBs enabled a saving of 609 tonnes of materials and components in one year, consisting of:

- 324.5 tonnes of aluminium,
- 46.4 tonnes of rubber,

- 123 tonnes of other ferrous and non-ferrous materials,
- 97.6 tonnes of other materials including plastic,
- 17.2 tonnes of materials present in the shock absorbers.

In particular, the quantity of ferrous and non-ferrous materials (including shock absorbers) accounts for 76% of the total resources that were used.

Main benefits

Overall, the purchase and sale of 45,310 bicycles contributed to notable benefits to the environment because the extension of the useful life of the MTBs enabled a saving of 609 tonnes of resources. The proportion of the resources being approximately 76% of ferrous and non-ferrous materials has also led to energy savings and reductions in CO2 emissions of over 80% compared to the use of virgin raw materials.

Performance Indicators

To further aid the extension of the useful life of MTBs, which are not subject to significant deterioration over time, it would be advisable to raise awareness both amongst users who possess a MTB that they do not use, and users who intend to purchase a MTB, of the fact that the second-hand purchase and sale system offers notable economic and environmental benefits and supports the circularity of the product and a more efficient use of resources.

Potential for roll out and development

This solution can easily be adopted by both private and commercial users to obtain economic and environmental value from products that might otherwise be kept unused in cellars or garages for many years and then abandoned. Likewise, the presence of an online market for these goods makes it possible to increase the number of users of this form of transport. In fact, these users might normally be discouraged by the high market price for the same product sold brand new.