



## **Product Lifetime Extension Case Study: Retalhar**

Company name: Retalhar (website)
Sector of activity: Textile reverse logistics

Implementation area: Local operation (headquartered in São Paulo, Brazil)

**Business strategy for product lifetime extension:** Upcycling

#### **Upcycling**

According to the Seung (2015) upcycling is a "process in which used materials are converted into something of higher value and/or quality in their second life". This represents the process of converting old or discarded materials into something useful, giving an item a better purpose from one cycle of use to the next one. Its principles are associated with the circular economy concept, which means the continuous re-use of products and materials in biological and technical cycles, returning them to society with a higher value than the original one.

#### **Context**

Retalhar was created in 2014 by Jonas Lessa and Lucas Corvacho (Figure 1), based on the know-how they acquired in the environmental management area of a uniform manufacturer and the perception of the textile waste problem. In addition, there was an underlining concern about social inequalities in Brazil and the uncertainty of professional options for the future.

It is from this perspective that the idea of building a social impact business that works towards minimizing the negative impact of textile waste generation arose. In addition to being considered a type of pollution, textile waste also means a waste of fabric, seen as a resource whose production process generates significant negative impacts on the environment. Cotton, for example, is one of the world's most water-consuming crops and user of agrochemicals.

Looking to address some of these issues, Retalhar's business model was created, receiving uniforms that will no longer be used by large companies, - for instance there are customers who have shipped 15 tons of uniforms in a year - offering both textile recycling and upcycling.



Figure 1. Jonas Lessa and Lucas Corvacho, Retalhar's creators

Upcycling is the transformation process that most adds value to the raw material that 'enters' the system, in this case, the fabric of the uniforms. And since the company's goal is to generate positive social impact, its employees include seamstresses from cooperatives.

In addition to the uniform upcycling, the fabric can, after the de-personalising process (in which the identifying characteristics of its function are altered or removed), be used as raw material for the production of blankets for the homeless or be sent out to winter campaigns, which collect clothing donations that are later passed on to charities and people in vulnerable situations.





Retalhar also offers its customers the de-personalising that allows the reuse of uniforms, since many of them arrive at the company still in perfect condition. The process involves the removal of the contracting company's logo from each of the parts, and then they are sent for reuse. Retalhar also offers the recycling of textile waste, carried out by a partner cooperative, generating new materials that can be reinserted in the industrial sector as input for construction, acoustic soundproofing blankets and the automobile industry.

#### **Results**

Its service portfolio enabled the company to receive and transform 63,237 kilos of fabric since the start of its activities in 2014, which is equivalent to approximately 160,000 uniforms and a volume of 473 cubic meters not occupied in landfills<sup>1</sup>.

Considering the emissions resulting from the fabric decomposition in the landfill, the amount of fabric treated by Retalhar corresponds to 929.581 tons of  $CO_2$ e avoided.

Due to its innovative nature in terms of business model and area of operation, and also because it is a social business aimed at generating shared value, the initiative was supported by an incubator and startups accelerator. The initiative won national and international awards, including the Social Entrepreneur 2016, from a large well-known magazine in Brazil, and Youth Changemaker Winner of Ashoka's Fabric of Change Prize.

### **Barriers and next steps**

Even with such significant results, there are still challenges to overcome by Retalhar, some of them related to Brazilian legislation, which does not oblige companies that discard textile waste to adopt specific measures to mitigate the impact of disposal. This non-obligation means that not many companies are investing in services such as the ones offered by Retalhar.

In addition, the volume of fabric received comes with two different challenges: in many cases, the quantity sent to Retalhar by its customers is so large that it is not possible to upcycle all the material - there is not enough demand for the amount of products that can be generated with the fabric received. On the other hand, due to the current business structure, it is not feasible to recycle small amounts of material.

Another important challenge Retalhar faces is to achieve a greater differentiation of its product portfolio, enabling the company to meet more specific demands from each client. The transformation of different types of fabric requires different processes, and financial investment is needed to do so.

After almost four years working in a market which is still underdeveloped in Brazil, the company is now at a point of reflection and strategic planning, stimulating the analysis of an extremely valuable knowledge about the sector of textile waste transformation in Brazil.

The cooperation among diverse players, such as textile recycling and upcycling cooperatives, waste generating companies and other social businesses, together with technical knowledge of transformation processes of this type of material, give the company a wide range of paths to follow in the future.

Aware of these challenges and strategic moves towards a more promising, sustainable and impactful future, Retalhar is preparing to add a pillar of consulting services, working towards reducing waste generation at the source.

Thus, it seeks to strengthen the partnership with customers and amplify the possibilities of making the difference, not only at the end of the process, but also thinking of new solutions throughout the ecosystem.

Source of information: 1 Retalhar







#### How to get involved?

Everyone can contribute to a more sustainable textile industry. Consumers have a double role, both when deciding what to consume, looking for more durable products depending on their design and raw materials, but also when choosing products from companies that address key issues of the value chain, passing through raw material extraction and labor relationship, and that allow an adequate end-of-life management of the product, ideally extending its life or reinserting it into the chain.

## **The Long View Report**

This case study is related to *The Long View Report* in two main aspects:

- Improvement of waste treatment infrastructure, because textile waste is a big problem in the country, Brazilian laws are not effective on encouraging textile waste treatment and upcycling can help solve this issue.
- Recognition of the full potential of the informal sector, since this market is still underdeveloped in the country and promoting this business among society can raise awareness and engage different players on maximizing its potential.



# Product lifetime extension in developing economies

Improvement of waste treatment infrastructure

In many economies a formal, environmentally sound and safe waste management system is needed. In order to make such a system function properly, public education on how and where to dispose products is required.

Recognition of the full potential of the informal sector

Informal economic sectors that revolve around trading, repairing and regaining materials from redundant products currently lack access to investment capital and information to make repairs energy efficient, safe and environmentally sound. It is recommended to recognize these professions and offer them social rights, official status, and training.