





CIRCULAR ECONOMY BUSINESS CASE STUDIES IN SOUTHEAST ASIA



Reztle

-  Baliuag, Bulacan, Philippines
-  Garment / textile
-  reztleph.com
-  Analysis period: 2022-2023

Repurposing Garment and Textile Waste

Business Spotlight

Reztle Fashion Enterprises, Inc. is a textile recycling enterprise that began as a hobby. The founder, Mark Pagaduan, was interested in recycling from childhood, which led him to experiment with repurposing old clothes and fabrics into other apparel and fashion for pets that he initially sold online and eventually registered as a business.

Reztle promotes the circular economy by giving a second life to used and discarded clothes which are brought to collection points established within Metro Manila and the nearby city of Bulacan. Reztle also reuses fabric from other textile and fabric wastes, such as end-of-life linen from institutional users like hotels and resorts, which are incentivised with lower buy-back costs for corporate products such as eco-bags, totes and gift bags made from their own discarded bedsheets, towels and linen, for which they are providing sustainability metrics which they, in turn, can use to measure and report on their sustainability performance and accomplishments. The main facility in Baliuag, Bulacan, currently operates out of a 361 m² sewing hub with 12 community seamstresses whom the owner regards as business partners. Mr. Pagaduan uses a Shared Value Model that compensates them with 40% share of net earnings, rather than the usual practice of a daily wage or payment per piece.

Since Reztle began, collection of textile waste grew to 8500 kg in 2023 compared to 1300 kg in 2022. By the end of 2023, the company had helped over 250 clients to divert 9800 kg of clothing and textile waste from landfill. Earnings have consistently improved, with earnings in 2023 almost 5 times more than in 2022. In the process, the company estimates that it has helped to save approximately 39 m³ of water that would otherwise have been consumed for new clothing production; it also helped prevent 29 metric tonnes of CO₂ emissions.

The business has served as an inspiration for the Pasig City Cooperative Development Office to establish similar collection and sewing hubs for discarded clothing and textile wastes to benefit members of new cooperatives. Furthermore, Reztle's founder has provided technical help and advice for the establishment of a sewing hub in Pampanga City by the Department of Trade and Industry (DTI), which had donated sewing machines and equipment to community associations running the enterprise through a Shared Services Facility (SSF) programme.

Keywords

Repurpose, Textile waste recycling, Textile circularity

Analysis of Reztyle

Context and baseline

In the Philippines, clothing imports and sales increase steadily each year, following global trends. Half of the clothing owned by millennials is less than one year old. The production of this clothing consumes virgin resources and large quantities of water and energy, and in addition generates water pollution, greenhouse gas emissions (GHGs) and microplastics. Many consumers do not realise that their unwanted or discarded clothing and other household textiles can actually be recycled, and do not need to end up in landfills.

Recycling began as a hobby for the founder, Mark Pagaduan, who inherited his father's love for old cars and a penchant for repurposing car parts. As a child, he relished going to junk stores and thrift shops where he would collect odds and ends that he would use to make Christmas decorations (*parol*) and other items. While poking around in one such ukay shop in Baguio city in early 2021, he met a seller who had loads of unsold oversized clothing and cold weather jackets which she was willing to give away because they were taking up precious store space. This sparked the idea of experimenting with repurposing these clothes, and after enlisting the help of an out-of-work seamstress who executed his design, a decent crop top was produced that he sold to a friend for more than double the labour cost it had taken to make it.

Since then, he has ventured into the business of turning used and discarded clothing into functional and saleable products like eco-bags, totes and gift bags, recycled apparel, and fashion for pets sold online, savouring the challenge of giving even the smallest piece of clothing or textile scraps second lives. His clientele now also includes hotels and resorts whose discarded linen he recycles into bags or pouches which are bought back by these establishments for reuse or to give away to their guests, often even sporting their own logos.

After meeting a social entrepreneur and recycling advocate who eventually became his friend and business adviser, Pagaduan's eyes were opened to the sustainability value of his hobby. He became an advocate for circularity, underlining the positive impact of providing people and establishments with creative ways to deal with their textile waste, divert it from the landfill and minimise their negative environmental impact.

Innovation

End-of-life management, Product development, Resource circularity

Innovation

Reztyle recovers and directly repurposes used fabric into different products. The process involves manual sorting and cutting out of reusable fabric pieces that are then sanitised and stitched into a different textile item, either a garment, accessory or functional cloth items like reusable (shopping) eco-bags, aprons, bibs or fashion for pets. Seamstresses stitch recovered fabric pieces together following prototype designs for different product offerings, which are then quality controlled. Given the diversity in recovered fabric, each product is unique.

Reztyle turns pieces that are unfit for repurposing as fabric into stuffing for toys and furniture. The remaining leftover cloth pieces are then supplied to Green Antz Builders, which mixes them with plastic waste to produce eco-boards. The process involves heating and pressing plastic/textile mixtures with a binder containing low volatile organic compounds (VOCs) into 1.2 x 1.8 m boards boards that can replace plywood or particle boards in office cubicles, table tops and other applications.



Circular Economy impact

Reztyle deploys the key circular economy strategy of resource circularity, by circulating discarded fabrics back into a second but different product-use cycle. Specifically, Reztyle addresses the steadily expanding challenge of unused garments and textiles, which are typically discarded well before the end of their technical lifetime, and create a stream of predominantly high-quality textile materials and fabrics of diverse compositions, styles, sizes and shapes.

By the end of 2023, Reztyle had recovered and repurposed 9800 kg of discarded clothing and textile, diverting it from landfill. Reztyle estimates that about 39 m³ of water were saved along with 29 metric tonnes of GHG emissions that would otherwise have been generated during the production of new fabric.

Reztyle furthermore works towards resource efficiency in its own operations, particularly through aggregating its logistics for textile waste collection and onward diversion of non-recoverable fabric waste to other recyclers with another recycling company that operates its own fleet.

Business and market impact

In its first year, 2022, Reztyle recovered 1300 kg of fabric, which increased to 8500 kg in 2023, while expanding to over 250 clients for recovered garments and textile items. Earnings increased nearly five-fold and the 3 original seamstresses in the Baliuag facility quadrupled to 12.

With institutional clients like hotels, Reztyle collects their textile waste and then sells them back upcycled products, such as eco-bags, tote bags, and gift bags; if the client prefers not to buy the product, the company charges a collection and diversion fee.

Reztyle is serving as inspiration for others, particularly the Pasig City Cooperative Development Office, which is working to establish similar cooperative collection and sewing hubs for discarded clothing and textile waste. The Department of Trade and Industry (DTI) through its Shared Services Facility (SSF) programme has donated sewing machines and equipment to a community association to set up a sewing hub in Pampanga City, with Reztyle providing technical and business advisory support for this initiative. Sewing hubs have also been set up by NGOs like Gawad Kalinga in Piel Baliuag, and Dear Me Foundation in Payatas Quezon City. These four hubs together employ 46 seamstresses who recovered or repurposed up to 14,000 kg of textile waste in 2023. They control the sales of their own finished products, whether back to Reztyle or directly to other clients, and they submit data to Reztyle on the volume of textile wastes processed as well as the finished outputs, for monitoring purposes.

Stakeholders

The founder of Reztyle believes in 'improving lives through circularity' and aims to encourage others to keep clothing and fabrics in use for as long as possible by recovering and repurposing them as different products in new use cycles. These actions provide employment opportunities for seamstresses, and Reztyle initially employed three

casual seamstresses. The main facility in Baliuag Bulacan currently operates from a 361 m² sewing hub with 12 community seamstresses whom the owner regards as his business partners. They work together in a Shared Value Model that pays them a 40% share of net earnings, rather than the usual sewing-industry practice of daily wages or fixed payment per-piece.

The clientele of Reztyle includes hotels and resorts that are incentivised with lower buy-back costs for corporate products made from fabric recovered from their own discarded bedsheets, towels and linen. The company provides these customers with sustainability metrics that they can use to measure and report on their sustainability performance and accomplishments.

Reztyle continues to receive business advice and guidance from its business partner, Green Antz Builders, which transforms the tiniest and most deteriorated clothing and textile scraps into non-load bearing eco-boards at its facility in Plaridel, Bulacan, and which also shares recycling technology and machinery. In turn, Reztyle continues to share its know-how and expertise with other groups interested in replicating the business model.

Implementation

There is a vibrant second-hand clothes market in the Philippines, and many Filipinos with lower incomes mend and repair their clothes repeatedly until the item finally wears out completely, thus maximising the lifetime of garments. However, with the increasing trend of fast fashion among the upwardly mobile, there is a target group of growing, eco-conscious consumers that value recycling, waste minimisation and protection of the environment. This is also true for institutions like hotels, which Reztyle tries to recruit into fabric recovery and repurposing as a means to showcase their sustainability commitments and build brand value.

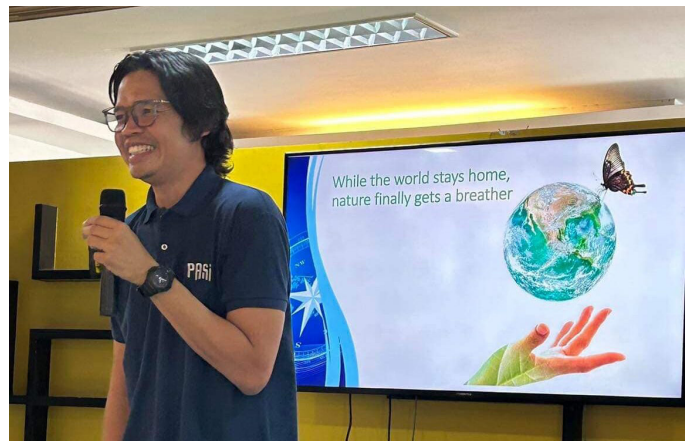
Reztyle is able to access the Shared Service Facility (SSF) of the Department of Trade and Industry (DTI), which provides sewing machinery, equipment, tools and training for new community recovery and sewing hubs. At its own facility, there may be an option to use technology for automated sorting and sanitising, which could reduce recovery and repurposing costs while channelling skills and training to the more creative design and execution processes.

At the same time, the company is striving to reach out to cooperatives that may be interested in creating collection hubs and community sewing hubs to provide training and livelihoods for their members, and expand textile waste recycling in the country.

Takeaways

The message behind this business is embedded in its name, Reztyle, which encourages everyone to 'recycle your style' into more sustainable apparel and textile consumption and use. Synergies need to be developed with like-minded businesses and with potential clients and communities to promote more circular thinking and practices in the use of garments and textile products, and to ensure that material loops are genuinely becoming more circular while waste is zeroed out.

Reztyle set an example that allows others to venture into textile waste fabric recovery and repurposing with minimal initial investments in machinery and location costs. While Rezstyle is not the first business in fabric recovery and repurposing in the country, it is leaving a significant mark by embodying the vision of a Shared Value business model. This approach ensures community involvement in creating a better environment while simultaneously generating income for families, aligning with Rezstyle's business purpose and social mission.



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