

Why this topic? Textile Waste.

First hand experience: My career of working for Textile suppliers, Fashion Houses, Garment production and as a Individual Designer-Maker. All these roles have led me to experience a lot of processes in different locations across the world and also across industries.

- Fibre, Yarn and Textile producers: The main waste here is the fibres and materials that are lost in the main textile production.
 - Many parts of stage in the textile production process have been industrialised as in the case of polyester and synthetic fabrics, but there are still many producers and even farmers of natural or animal fibres who are doing the first stages of collection and washing of the fibres by hand and they are exposed to many kinds of chemicals which can be harmful to human health (unless the process is organic).
 - When the textile producer receives the fibre there are necessary processes like washing and carding to refine and align the fibres. These make more consistent and stable yarns which can then be woven or knitted into fabrics which have less variations in the quality control stages.
 - The washing stages also allow the yarns and the cloth produced to also be dyed and finished higher standard too. *The finishing process produce lots of fibre wastage and also produce offcuts which do not get sent onto the Textile Suppliers. This could be a resource stage for the textile composites.*
- Wholesale Textile suppliers: The main waste here is offcuts, end of rolls and spoilt textiles
 - Smaller Textile suppliers and even fashion brands which have in-house textile design teams often visit and take cuts of fabric from Wholesalers.
 - These fabric swatches come from larger rolls to create swatch pages which they can then share within their Design teams in order to create the next collection designs and garments.
 - Based on these swatches, textile suppliers who do secondary processes like printing or embellishments, can order lengths of materials to make their textile samples on. *A waste resource here may come from trimming the fabric down neatly in order to serve the next client and keep standards and presentation in order.*
 - Textile Supply events are another big resource. There are thousands of visitors to events around the world and the preparation of the swatches will produce textile waste too.
- Fashion houses and Textile suppliers: They often visit other wholesale Textile suppliers and smaller Textile Producers for fabric samples and swatches.
 - It's these swatches of small bits of fabric that are a seasonal turnover based on fashion industry trends. Suppliers of all sizes will have departments that send out samples to potential and regular fashion brand clients. These often come in two forms:
 - Attached to papers which are then and stored in arch-lever files
 - Attached to card or plastic hangers and stored in large swatch libraries for refernce.

- These swatches have a shelf life of 3-6months depending on the type of fashion business and up to a year if they are a base fabric or Greige fabric supplier (whose fabric is unfinished woven or knitted fabric that hasn't been bleached or dyed.) As these designs do not change much, like cotton or poly jersey or woven textiles for interiors, swatches may be kept for longer.
- *Its this resource of samples and swatches which are attached to other material that I think can be exploited, especially as some fabrics become unuseable for smaller projects as they can have labels, glue and even finishes which make them a waste issue.*
- There is also an issue of copyright and intellectual property that have led some companies sending their sample garments and textile designs to be incinerated or to landfill, just so other companies cannot steal the design. *If a supply chain of confidence can be created to assure these companies that their waste would be processes and created into a resource for them to reuse back into their company or to sell onto another company to create another product, the waste system has the possibility to become more circular and less environmentally damaging.*
- Garment production: Most garment designs traditionally have flat patterns which are then plotted or laid out on a piece of fabric and then cut from the textile.
 - Fashion houses and garment producers who have taken swatches, can order larger lengths of material 2-10metres to create garment samples from Textile suppliers (who have to cut lengths from the large rolls)
 - Fashion brands use this material to create their first garment samples.
 - The waste or negative fabric comes from the fabric surrounding the positive pieces required to make up the garment.
 - *The waste resource here would be any of the fabric offcuts coming from the pattern cutting stage and then garment sewing stages (CMT)*
 - Also from the perspective of the Textile Supplier, previously having been a 100+m roll of a particular fabric, their stock can vanish very quickly just sending out lengths of fabric for garment samples. This can lead to constant resource of end of rolls and potentially the fabric being out of stock and unavailable, which in then doesn't get ordered by fashion brand clients. *So we co back up to the wholesalers and smaller textile suppliers who sometimes have a waste resource of old, unwanted stock.*
- Retailers and Haberdashery shops
 - Often retailers have smaller rolls of fabrics and entirely different ranges of the quantity that they have in their shops. Customers can buy any amount from the textile retailers, so when there is an odd length of fabric left, these are called remnant and get sold as such.
 - There are also swatch samples in the stores that sometimes get sold as remnants. In honesty I don't know what happens to remnants that don't get sold and how long their shelf life, or where they get disposed to afterwards.
- Individual Designer-Makers, home crafters and everyone from school age to university students upwards!
 - Individual Designer-Makers will often buy from small textile suppliers and retailers. The fabric waste they may produce may be for similar reasons to a

large fashion supplier, but with a lot less. Often in my experience, this waste gets mixed together with the regular rubbish... due to laziness or even for those who are aware of recycling and sending textiles to landfill, because there are no locations for recycling.

- This is the case also for people doing home-crafts who cannot find places to recycle. Also the schools and universities who host craft projects often don't have full access to recycling (a whole other issue, but still a valid one to point out.)

Ultimately I've chose to look at 2 waste streams top focus on

1. Textile Supplier resources of samples and swatches which are attached to other materials for swatch libraries
2. Garment CMT waste of fabric offcuts coming from the pattern cutting stage and then garment sewing stages.

Defining the waste streams that I will source from, will allow me to look into a more personalised **service** of collecting the waste and processing it, as well as the type of **product** which can be created.