Unit 7.3 Avoid Obsolescence and Overproduction by Reducing Time to market

Contents

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7.3.1 European Textile Trends

Definitions Textiles, Clothing, Accessories

Textile industry commonly refers to the production of yarn, textiles and fabrics,

Clothing industry (also referred to as the garment/apparel/fashion industry) refers to the production of garments

The sector includes household textiles and technical/industrial textiles (for instance, textiles for industrial filters, hygiene products, textiles for the car and medical industry).

The fashion industry can also include shoes, bags, jewelry and other accessories in addition to clothes.

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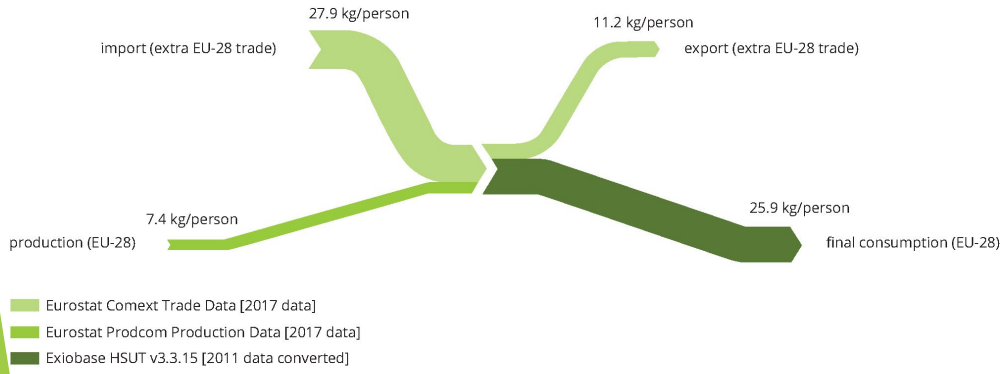
7.3.1 European Textile Trends[6,7]

Following the phasing-out of WTO Textile quotas, the share of imports in European clothing consumption increased from 33 % in 2004 to 87 % in 2012.

The production of textiles, clothing and Accessories has one of the most complex supply chains.

EU is the second largest exported in the world ($40billion in 2017).

EU Imports account for $112 billion



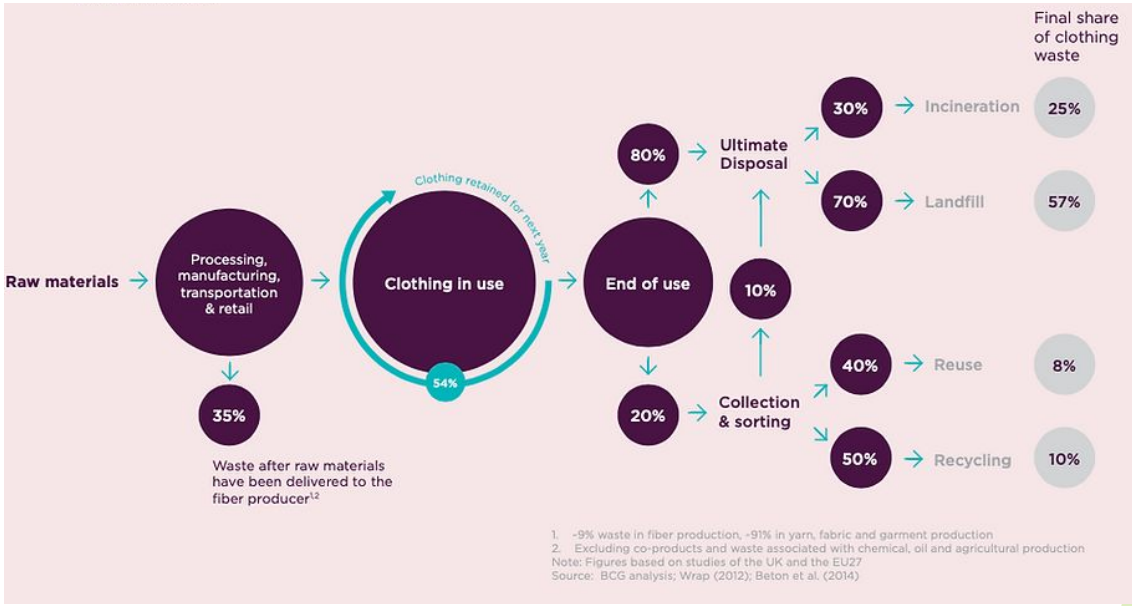


Figure 1: Clothing cycle[13]

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Consumer Use of Cloths in EU[6,7]

5% of household expenditure is on clothing/footwear (80% for clothing, 20% for footwear)

In 2015 EU citizens bought 6.4 Million Tones of Clothing.

30% of clothes have not been used for a year.

Fast fashion constantly offers new styles to buy, ZARA offers 24 new clothing collections per year, H&M between 12 and 16.

There is a tendency and a requirement to make every phase of production more sustainable

Figure 2: Alternatives to fast fashion[14]

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7.3.2 Textile Waste

Facts and Numbers (2018)[5]

- > 1.7 trillion dollars sector (apparel and Footwear)
- > 150 billion garments / year
- 30% of clothes is never sold and it is worth 210 billion dollars
- > 460 billion dollars the value of throwing away
- More than 50% of fast fashion products are disposed in under one year
- > 12.8 million tons of clothing is sent to landfills
- > 1,2 billion tons annually

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Types of Textile Waste[1]

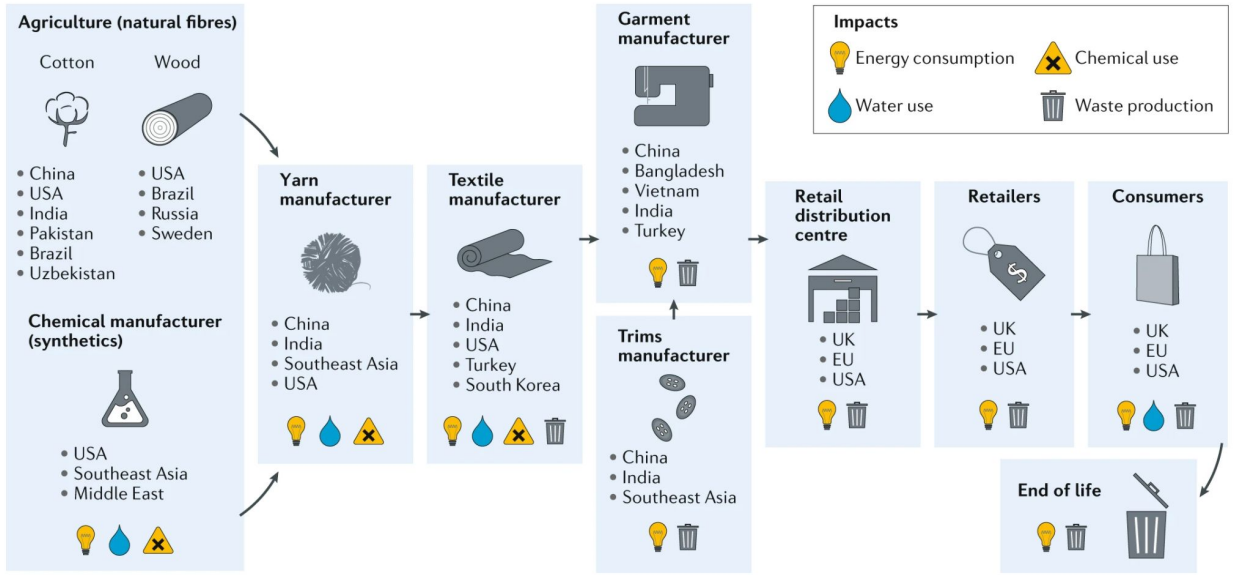

Figure 3: Textile supply chain[15]

Finished Goods

Unsold Clothes and Old clothes

Raw Materials

Deadstock

Design Models

Prototype rounds

Waste generation actors

Forecasting error, Growing demand for clothing, Distortion of sense of value, Unit cost

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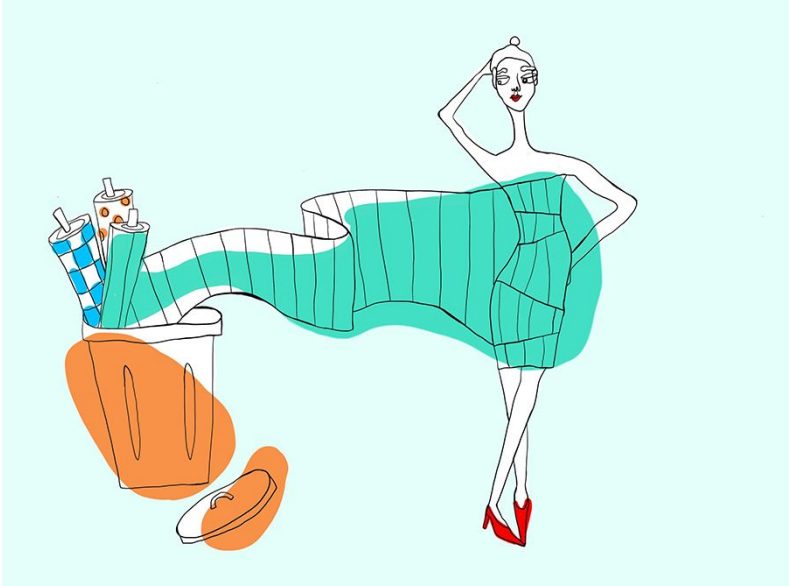
Types of Textile Waste[5,7]



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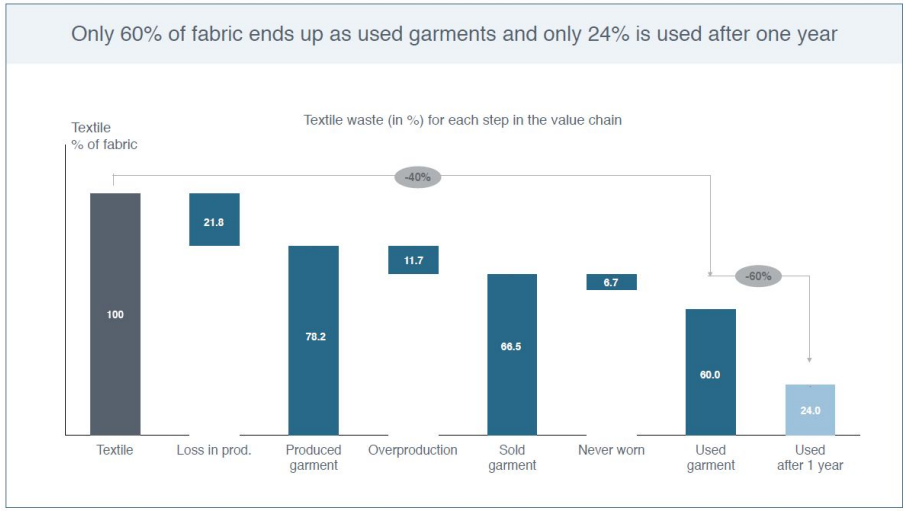

Finished Goods

Waste Reduction of Finished Goods

- Waste generation actors,
  - Forecasting error, Growing demand for clothing, Distortion of sense of value, Unit cost
- Waste prevention actors
  - On Demand production
  - Zero Waste Design
  - Redefine Progress and Sustainability
  - Rewrite the regulations

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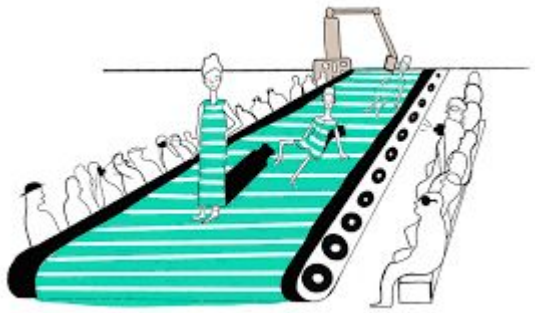
7.3.3 On Demand Production



On-demand production is fast-turn, small batch production local to the end consumer. This can be a one-off customized item or a rule-based batch order.

- Pushed by Covid-19 pandemic
- Agility by
  - capturing the latest fashion trends
  - No Inventory
  - Customer satisfaction
  - Less environmental issues

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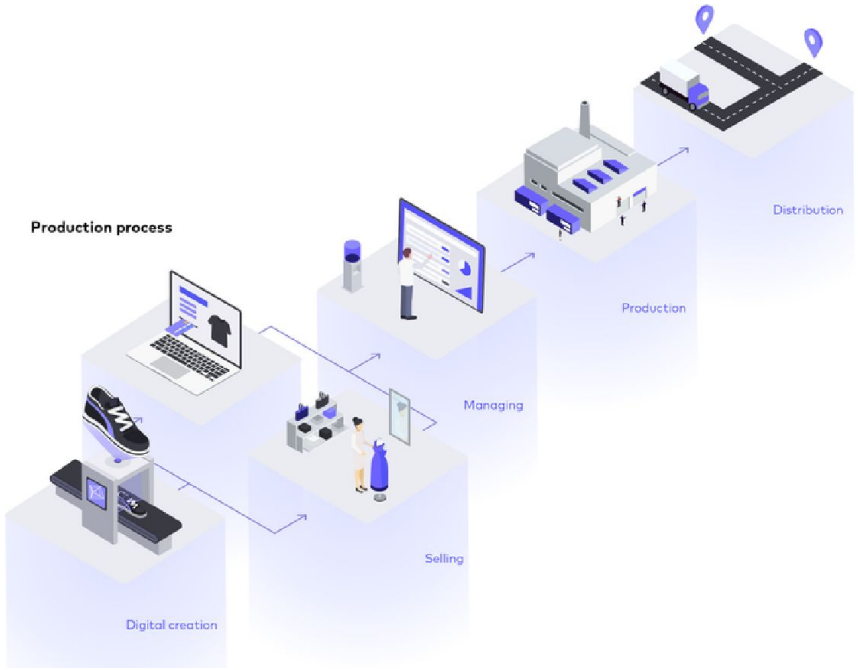
7.3.3 On Demand Production



Demands[10]

- Zero waste design[9]
- material planning
- invest in local production
- Technology base11d (digital fashion)

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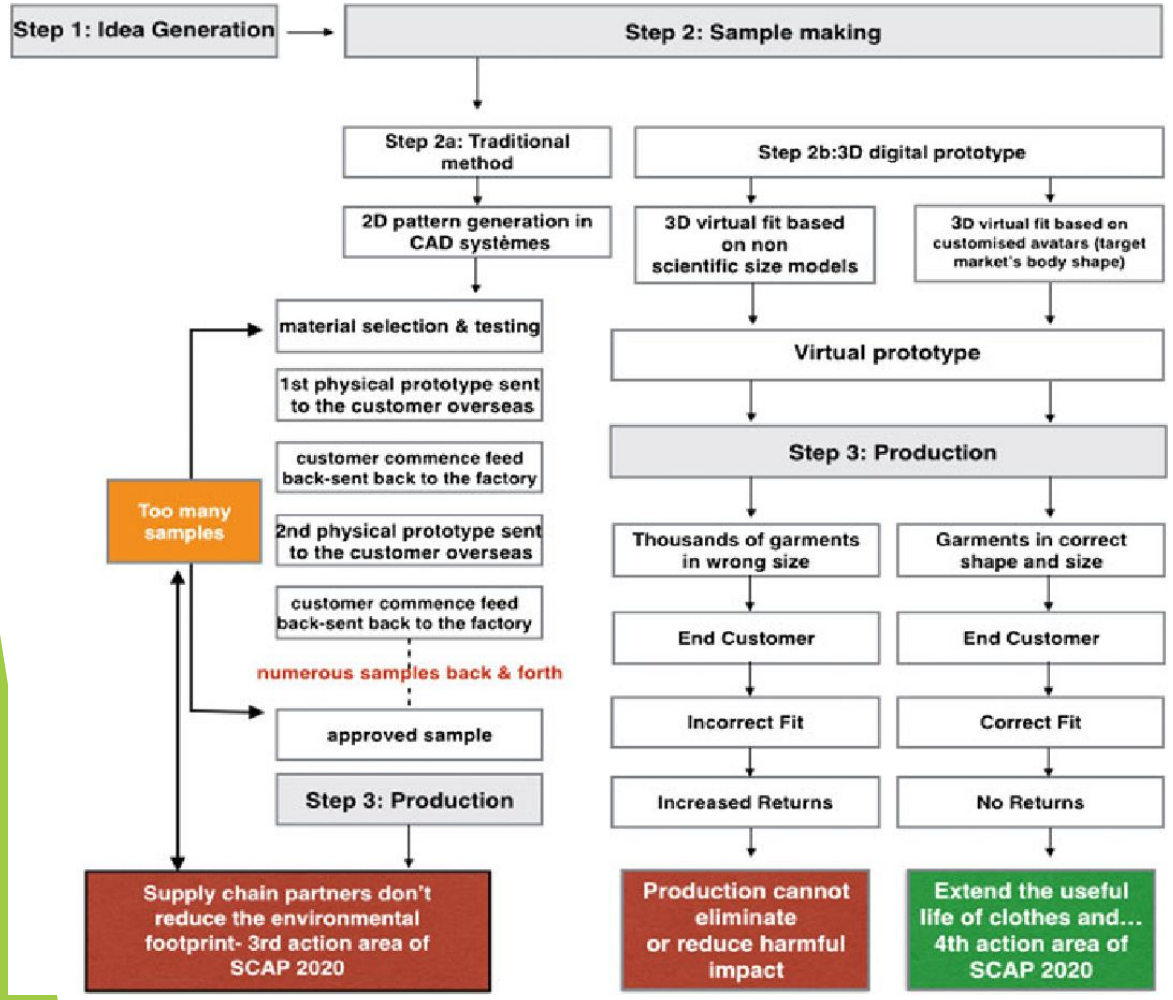
Sustainable Apparel Design Model



The traditional design phase[12]

- is based on 2D sketches
- classical product development cycle, from preparation of the cut pattern and modifications,
- to sewing prototypes, and
- innumerable iterations with
- many samples traveling back and forth between the factory and the customer

Using digital assets and tools

- reduces physical sampling costs,
- increases speed-to- market
- reducing product development lead-time,
- leverages Voice of Consumer (VOC)
- Improves sustainability (not only on samples)

Necessary for On Demand Production

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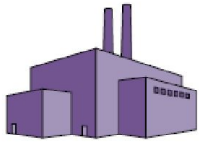
7.3.4 End Notes

Policymakers

- Legislation
- Regulation
- Green taxation
- Tools for better balance and a slower system
- Policy for extended producer responsibility

Industry



- Prevent waste
- Invest in pollution-control technology
- Avoid surplus production
- Close the material loop
- Supply-chain transparency

Retailers

- New business models to support slower consumption and circular economy
- New pricing system to consider the environmental impact of a product

Consumers

- Extend products use times
- Conscious consumption
- Slower consumption

- Despite the global awareness of fashion industry contribution to environmental pollution the industry continues to grow.
- Complex supply chain and each step has its own contribution to environment
- Current fashion-consumption practices are harmful to environment

All stakeholders need to be motivated[1]

- Policy makers
- Redefine business models
- Train consumers

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