

Supervisor:

# Master's degree programme

In International Management

#### **Final Thesis**

# "Circular economy and sustainable fashion: how recycling and up-cycling change value chains in the fashion industry"

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Al prof.Micelli per il supporto e la guida ricevuta nel mio
cammino universitario e soprattutto in questo percorso di tesi;
Ai miei genitori per il sostegno e gli insegnamenti ricevuti
e per aver reso possibile tutto questo;
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anche nei momenti più difficili in cui tutto sembrava lontano;
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#### **ABSTRACT:**

The main scope of my thesis is to describe the model of the circular economy and the theme of sustainability in particular referred to the fashion industry and all different segments of the sector. I will analyze all different steps of the value chains and how these ones are affected by changes that occur in the competitive arena of the sector; focusing my attention on recycling and up-cycling techniques applied by new and consolidated fashion companies.

The research question chosen as file rouge and that I will seek to answer at the end of my work is about the importance of sustainable and circular decisions for the success of the business; analyzing which actions are necessary for companies today in order to remain competitive in the market. These aspects are crucial today considering new needs, new scenarios and also new preferences of customers. We can say circular models and sustainable ones are recent trends that have already been developed and insert within companies' business model; while recycling and up-cycling techniques are very innovative models that firms are starting today to implement analyzing models of pioneers of these aspects as for example the Suisse company Freitag.

The first chapter is dedicated to the Circular Economy, its origin and definition and the main differences with the traditional linear model. I will also describe relevant activities studied by Ellen McArthur Foundation that will help companies establish circular and sustainable models as the attention toward raw materials and processes. The analysis will cover also the description of the sector, object of the thesis, which is the fashion one; leveraging the consequences of the pandemic to the sector and the fact this changes have been encouraged by Covid19 and new consciousness created in people and companies' minds. The chapter will finish with a focus on resale market which is considered one of the most important initiative implemented by firms but also by customers to find solutions to the increasing pollution caused by the industry. In particular, I will present the importance of resale in terms of turnover generated and different ways it is implemented in various regions of the world: China, the African continent and America. Finally, another important aspect I will differentiate for resale is the one between offline and online sales according to where they take place; for example the fact resale is held mainly through traditional markets in Africa while it is based on platforms in America or

Europe because of the importance of the online segment and the high level of development of technology.

The second chapter is dedicated to sustainable fashion; starting from a general overview of what sustainability is and its major trends, I will at the end focus my attention on such trends applied to the fashion industry and to customers' preferences. The starting point will be the meaning of the term and the history of it referred to the entire economy and finally to the fashion industry. I will also describe the so-called ESG principles which are part of the social corporate responsibility that is becoming a core activity for companies. We will, later, move to the heart of fashion industry starting from important regulations that have been created in order to promote sustainable activities and decisions. The chapter will continue with a description of sustainable supply chains with the preference over more short and local chains able to adapt to fast changes and to different cultures and habits of clients as underlined with the sudden explosion of the pandemic on a global scale in different moments. Another important change implemented by fashion companies is related to the use of organic materials and in fact, I will analyze this aspect and the way firms have faced a radical change as this one; through examples of initiatives and definitions about sustainable raw materials and biodegradable ones. At the end of the chapter I will present a focus on how much clients preferences have influenced companies in their changes in value chains; the results of different researches and surveys have confirmed the fact new generations are very sensitive to sustainable themes and so I will present the variables that are more relevant and the solutions adopted by fashion firms.

The third chapter is completely related to recycling and up-cycling techniques applied by fashion companies for their productions and for the commercialization of their items. I will begin with a general overview of recycling; its meaning and the related regulations and initiatives implemented by national and international institutions. I will also describe different ways companies start recycling and in particular internal and external methods adopted but also how recycling changes in different regions of the world. The other important aspect analyzed in the chapter is the one of projects thought and implemented by companies for the collection of used products ready to be recycled as the Calzedonia initiative. The chapter will continue with the description of up-cycling methods which are more innovative, starting from the origin and the meaning of the word. Other aspects covered are for

example the tendency of showing up-cycled clothes for example in the gaming industry or in specific events that attract fans of sustainability and of these new methods able to capture their attention and to start acquiring new clients in order to achieve after the mass market.

The last chapter is dedicated to the analysis of specific cases study of companies that have developed specific strategies in order to pursue recycling and up-cycling activities. I have decided to consider two different typologies of companies: startups and incumbents that operate in this segment that will become the predominant one in the future. I will present a little history of the companies, its core values and the objective it wants to achieve; after I will describe the activities and the main results obtained in terms of products launched in the market and in some cases prizes it has won. All these companies are characterized by the fact they share specific values related to circularity and sustainability and also specific decisions about location of production plants and market where they want to sell their items. After the description of all eleven companies I have chosen as example; I will concentrate on some aspects which are shared by the majority of them. In the specific, I will analyze the new idea of beauty promoted: more linked to intrinsic and inner values than to traditional aesthetical principles. The other important aspect is the shortness of supply chain and mainly the changes they cause and the reasons of such decisions. At the end of the chapter I will focus my attention on the concept of less is more applied to fashion companies, describing how this new trend has been supported both by emergent designers and entrepreneurs and by important stylists as Giorgio Armani.

#### **CHAPTER 1: THE PHENOMENON OF THE CIRCULAR ECONOMY**

The first chapter is dedicated to the description of the circular economy: the model, ways of implementation and in particular how the phenomenon has been developed in the fashion industry. Among all different typologies of circular activities we will focus on the resale market and the way it is implemented in different regions all over the world, according to differentiations in level of economic development and social conditions.

#### 1.1 THE CONCEPT OF THE CIRCULAR ECONOMY

The first appearance of the term "circular economy" (CE) is attributed by many scholars to Pearce and Turner in the early 1990s, even if it was very narrow and confused .The noun has both a descriptive and a linguistic meaning, in the sense we can explain the expression using the definition given by dictionaries but we can also go deeper. In fact, when we use the noun "circular economy" we refer to a concept opposite to the one of the so-called "linear economy", which is based on the idea of overproduction and accumulation of wastes. With CE, economists and scholars have grouped many terms that referred to specific aspects of the more general word and that were common in the past as green economy, ecology economy, zero emission production etc.

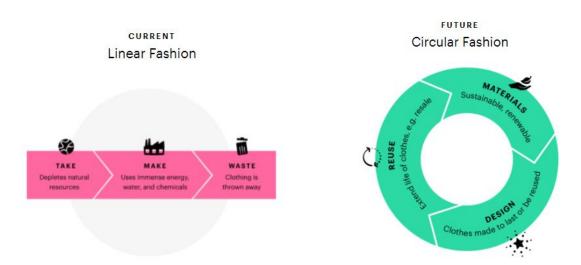


Figure 1: linear cycle and circular cycle description

Today the term is linked to the concept of the triple "r": reduce, reuse and recycle in order to implement more equal and sustainable models. The first word reduce means the decreasing amount of clothes that companies will produce in the future

because of new production techniques and an higher quality of their products; talking about reuse we refer to the new trends of resale market and finally with the world recycle we refer to the use of different items for the production in the fashion industry. During these last years the development of CE principles is becoming a real necessity if we consider that by 2050 we will consume three times the amount of resources we are able to produce and the global population will constantly increase making the linear economy model unsustainable. New methods have to leverage the maximum use of existing things , trying to change their uses and scopes before their abandonment. (ScienceDirect)

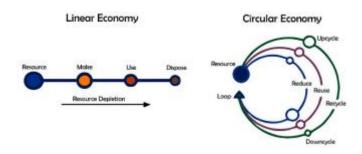


Figure 2: linear model and circular model (Akhimien, Latif, Hou) (6)

According to the report published by the Circular Economy Network in 2019, Italy has one of the highest levels of achievement of the triple r approach and ecosustainable objectives, occupying the second position after Germany among European countries. (Sciencedirect paper) Today the importance of CE is not emphasized only by governments and international institutions, but there are also some NGOs that are playing crucial roles such as Ellen MacArthur Foundation.

The need for the implementation of the so-called circular economy comes from the increase in consumption in particular in developed economies; but also it derives from the competitiveness and cheap prices of items produced in emergent economies that increases, as consequence, consumption. All these aspects take into consideration only the profitability side of business without considering the other important aspect, in particular nowadays, which is sustainability. Another relevant concept which is close to the one of CE and that today has to be taken into consideration by companies is the attention to the triple bottom line approach; it means the need to consider the social side, the environmental one and finally the economic one. At this time, we can for sure say that this last aspect has been losing importance in favor of the first ones in order to remain competitive and respect laws

developed by governments and international institutions. It is important because today, for companies the expression "the business for business is business" is no more acceptable for the achievement of a strong and durable position of competitive advantage and market leadership. Of course we can say that a firm in order to survive has to have a positive income and a consistent turnover; but it has to be accompanied by a social responsibility over employees, external actors and the community in general. At the end the environmental side is the third important variable that is very sensitive to many people nowadays and also to national and international institutions who are imposing continuous and striker regulations and simultaneously benefits for greener businesses.

The circular economy model is considered an opportunity, according to Todeschini, for companies to start a radical innovation process that involve the entire value chain and the linkages with external entities as suppliers, consumers, competitors.

According to Ellen MacArthur Foundation, the Circular Economy is founded on 3 main principles that companies have to know and implement in doing their business activities: (Ellen MacArthur Foundation)

- Eliminate pollution and wastes: today products are very cheap and for this reason people purchase them, use them very few times and after they throw them producing a lot of wastes and pollution made because of the disposal of such items;
- Circulate materials and products: companies should concentrate their r&d efforts for the project of durable, high quality and sustainable items taking into account the entire process: from the production or purchase of raw materials until the sale of finished goods;
- Regenerate nature: business activities should rethink their business model in order to make materials reusable for different scopes or tear down them in order to create elementary parts that can enter as components of new products or can be positive for natural resources as the soil or the water.

Considering what we have said in the previous paragraph, there are many methods that can be developed by firms for becoming more circular, for example: (Circle-economy)

- Increase the interest in favor of regenerative resources which are already present in the environment and can be uploaded or modified for the different needs;
- Increase resources' lifetime thanks to reparations, recycling and giving a second life to products thanks to resale approaches;
- Use wastes, it means try to produce in a way that admits the possibility to exploit wastes and make with such materials new items;
- Change the business model exploiting new opportunities coming from CE and also incentives given by national and international institutions;
- Increase transparency along the entire supply chain declaring explicitly the origin of materials, the way of production and conditions of workers;
- Improve digital technologies in order to increase the share of clients and to produce effectively what you will sell considering consumer needs and preferences.

Today the circular economy model is supported by new inventions and by the development of new technologies as block chains and artificial intelligence that can help monitoring levels of wastes, consumptions of raw materials, eventual weaknesses in the process but also they may increase the possibility to create open identifications about products' origin and the way firms project their operations; but also the implementation of new economic models for example sharing economy and platform economy.

#### 1.2. CIRCULAR ECONOMY APPLIED TO FASHION INDUSTRY

#### 1.2.1. THE FASHION INDUSTRY

The fashion industry is considered one of the most important source of global income with a revenue of \$393.71 billion in 2020 and an increase data of \$409.26 billion in 2021 considering the entire sector (apparel, bags and accessories and footwear). The tendency is estimated to grow continuously with a CAGR between 2021 and 2025 that will increase of 7.42%. The majority of income is generated by China and the percentage will increase in the following years and also in recent ones, in fact it has been one of the first country to recover 2019 levels of economic revenue, followed by US and with less intensity by the European Union.

The pandemic had surely a strong impact on the sector changing the profit's levels, the habits and the way companies operate obliging them to reinterpret their models adapting to new needs and new conditions, dictated by the health situation all over the world and by restricted regulations imposed by governments and institutions.

The year 2020 was characterized by extreme and unique conditions that fashion companies had to face and overcome in order to survive. First of all many governments imposed lockdowns and strict closures of national boundaries and economic activities within them; blocking the flow of tourist which was one of the most relevant source of revenue in particular for luxury brands that leveraged their presence in international airports and touristic towns as Venice in Italy or New York in the US. But also, with local closures, firms remained with a huge amount of unsold stocks in their warehouses, obliged to sell them after the open at discounted prices. The pandemic impacted also the time required to produce and deliver products, because of the reduction of transports and safety measures required, that in many cases decreased the number of workers admitted in a limited and close workspace. Another important consequence was the increase of shipping costs for the transportation of items from production plants, usually located in the far east, to the final consumer; the price increased of 600% during the pandemic and still today is very high compared to prepandemic levels; increasing exponentially prices. It is estimated that by the end of 2022, 67% of fashion brands will increase their price in order to be able to deal with such rises reducing purchasing power of final clients.

In 2021 the global situation started to improve with differences among regions in the world, depending on the rate of vaccinations and the national economic damage caused by the pandemic. Comparing different situations in the various regions of the world: the Far East and North America will recover faster; while in Latin America there will be differences across countries with Mexico having a positive recovery rate and Brazil one of the latest one considering the tremendous consequences in terms of deaths and disruption; the Middle East will recover also greatly in particular because of oil extractions and the increase in its price; the situation in Africa is very ambiguous and it depends on the availability of vaccines. Globally, fashion sales reached from 96% to 101% of 2019 levels and in 2022 the rate will achieve 108%. Among the sector, the luxury

segment is the one able to recover completely pre-pandemic levels by the end of 2021.

The recovery is also encouraged by the positive consumers' attitude toward purchases due to the high level of savings collected by them during the months of lockdowns; when they bought mainly underwear, nightwear and sportswear in minimal amounts; paradoxically these categories are the ones that reflected a decreasing demand in 2021 because people today want to buy something more elegant and chic. The same is happening for the footwear segment where people are asking not for sneakers but for women's heels and elegant shoes.

#### 1.2.2. CIRCULAR ECONOMY PRINCPLES IN FASHION

As we already said, the fashion industry is the fourth most polluting in the entire economic system after energy, transport and agriculture. For this reason quick interventions are required both in increasing sustainability and in implementing circular models. The CE is becoming very popular in the sector, in fact 60% of brands have already made huge investments for the introduction of close-cycle models within their value chains.



Figure 3: example of pollution caused by fashion production plants in emerging economies

The importance of circular economy models turns out to be even more important if all the companies know that the sector is responsible of the waste of 40 million tones of textile every year, with data in continuous increase. Another reference that should shock consumers is that every year the sector looses 500 billion of sales because of overproduction and linear systems. (Emf.Thirdlight)

With these new systems, we can reduce wastes and also the amount of extractive materials required for the production, for example implementing resale, recycling, repairing or rental strategies. The interest over new and original products is encouraged, in particular, by new generations who see these experimentations of items made with recycled products as an example of unique self-expression and as a sign of distinction. A new trend that is emerging recently is the so-called "collaborative consumption" based on consumers' products exchanges that make the increase of lifecycle possible. Examples of collaborative consumption can be found during pop-up sales organized by influencers during weekends or with exchanges of products for free in order to change your own clothes without buying something new or spending money. The new trend is encouraged by the extreme use of social networks by people in recent years and in particular with the spread of the pandemic.

The implementation of these typologies of models requires a very deep effort, in fact it is more radical than the simple application of sustainable principles. You need an innovation of products and processes, starting from the design of items that has to be recycled-oriented leveraging on modularity of different parts and fibers. For these reasons many incumbents created partnerships with startups in order to both exploit their own advantages: consolidated firms have the reputation, their loyal clients and the infrastructures; while insurgents can leverage on the absence of past investments, on innovative ideas and in many cases on the support of local entrepreneurs. For example the collaboration created between Salvatore Ferragamo and the Sicilian brand Orange Fiber in 2017: they mixed their ideas and capabilities for the creation of a collection completely made with organic fibers which come from oranges. (Orange fiber)

The CE models have also encouraged the birth of many brands specialized in rent activities within the sector. These economic activities are very appreciated today by consumers because they can satisfy all their needs: they can, in fact, wear

continuously new clothes without buying them so in this way they pay less for the rent than for the purchase and they are more sustainable. The model is particularly relevant in the post pandemic period when many events start again to take place in presence and people need adequate outfits; with rent they have the possibility to be glamour without purchasing something they will wear only two hours in their life.

Another important challenge for fashion companies is the rise of the digital world within the sector both for sales, communication and production. Digital tools have been used in recent years as part of advertising strategy for example creating lots of partnerships with the gaming industry: it was amazing the income of \$5.7 million earned by Dolce&Gabbana for its collaboration. Gaming is today very popular among Millenials and GenZ and increases its share exponentially during the pandemic because people were obliged to stay at home; fashion companies exploited these new channels as ways to implement their advertising campaigns in times when people are at home. They made their products visible and encouraged the sale also of elegant clothes and shoes.

Digitalization has also influenced the rise of social media as advertising tool and sales channel; it is estimated that 74% of consumers consider advises present on social networks as an influence. In 2021 only in US this channel for sales amounted to \$37 billion and in China nearly 35.5% of total selling were generated trough social networks. Companies use these tools also for collecting data which are important in order to direct new collections and match better consumers' preferences at zero price, rather earning from previous sales. Finally they are particularly useful for the management of wastes, monitoring the amounts and the typologies; for example brands as Adidas and Zalando are now promoting such instruments with the aim to reduce numbers and gain reputation in terms of circularity models. (state of fashion) The real challenge for the future are to normalize these circular models in people's mind and to exploit digital tools for the promotion: if for new generations it is easy because they have growing with these ideas and problems of the world; old generations as Boomers are facing this change as adults so it is fundamental to change completely their points of view and the way they purchase. For what concerns digitalization, companies should exploit their online channels and social networks' pages to

promote the models and increase the share for these preferences through circular and sustainable ways of operating and selling.

We can say all new needs emerge from the rising popularity of the "less is more" approach based on the idea that quality is much more important than quantity and the durability of products is considered a core element for the value of products.

#### 1.3. RESALE MARKET

The term resale market refers to all the activities with the aim to sell and buy something already used by someone else. The trend had a total turnover of 36 billion in 2021 and will achieve 77 billion in 2026, growing eleven times faster than the other segments of the fashion industry. (ThredUp)The resale market started to become popular in brick-and-mortar stores where people purchased old luxury products no longer in the market as bags and clothes; these shops are known for selling vintage items. Today this trend has become very popular in particular online thanks to the birth of many platforms and also the attention posed by important brands over the theme of circularity. We can say that it has been living the same cycle that outlets and first e-commerce sites have experienced in the past: they are all ways to increase sales and reduce unsold items at the end of each season. In fact, outlets sell products from old collections that otherwise would have been throw away and e-commerce sites which are able to capture more clients and they can maintain prices low because they have less costs than traditional shops.

The pandemic has accelerated the popularity of this system because people spent more time at home and so they dedicated to their wardrobes selling old clothes and also buying more consciously: people pay much more attention to quality and reputation of brands. In 2020 36.2 million people bought secondhand clothes for the first time and 76% of them had positive feedbacks and will buy again in particular from GenZ and Millennials. New generations are very important for companies in order to align their strategies to clients' needs and so it is fundamental to consider that about 45% of Genz and Millennials will buy only from brands that consider sustainability as one of the core values and resale is considered a key variable for their decisions in the future. For these reasons the majority of brands, about 60%, is implementing secondhand strategies in

order to increase the reputation of the brand enhancing the theme of sustainability and acquiring new clients interested to those topics. There are also fashion companies that start resale strategies in partnership with platforms or startups born exclusively for these reasons, reducing organization and logistic costs which are shared between partners. (ThredUp)

The resale market is strictly linked to sustainability, in fact it could reduce GHG emissions of 143 million tons by 2030 and it could permit the alignment to the objective of maintaining the global overheating under 1.5° Celsius degree. The increasing popularity of resale has also permitted the saving of 542.350.138 products that instead would have been purchased new during last year. Secondhand market has also been influenced by the multiplicity of possibilities which come from the c2c market: it means the case when both buyer and seller are private people who pursue the activity in their free time. Another encouragement in favor of resale comes from the role of governments that can intervene for example eliminating sales tax or reducing them or giving incentives to clients and firms that decide to establish a circular activity. These possible incentives have an important impact on the so-called psychological biases, creating an increase of the consumer base of 47% because of the idea to save money and simultaneously do something positive for the community with nations' support. (ThredUp) In fact the main reasons people decide to capture resale market opportunities are, of course, economic ones followed by critical motives and hedonic ones. Considering the first group we can say that resale market permits to buy also luxury and unique products at low prices without compromising the quality; it is also a way to purchase something in a fair way in fact, we are sure that the value chain is sustainable and that we are causing a positive externality for the sector. If we analyze some critical factors we can surely describe the purpose of environmental, ecological and ethical consumption as a base for this kind of decision.

The growth of resale market has required the creation of specific tools in order to make transactions more fair and to insure consumers their purchases are authentic in particular for luxury brands which are quite expensive. An important instrument developed recently is the product passport that can be developed digitally or using cartels. In the passport people can find the description and the characteristics of the products with reference to specific codes which identify

each single product as original and authentic. It is important, in fact, for resale to track the history of each single product and to check its authenticity in terms of conditions and originality.

### 1.3.1. Different approaches to resale market

As we have already said, resale market is a trend that has constantly increased the value and the popularity among consumers and brands all over the world; surely the approaches implemented in different regions change according to their level of development and the main features of local communities, territories and economies.

The resale market can be described following a peculiar path for the fashion industry; in fact many clothes that are considered wastes for developed countries are sent away to emergent and poor nations in order to encourage the development of such countries and also leverage their economies as happens in Africa with products coming from Western nations and in particular from the US. According to the different levels of technology, resale techniques are adapted to local characteristics: developed countries for example are leveraging digital tools while more poor countries still utilize brick-and-mortar shops or more traditional local markets.

We start the analysis of the major regions and countries starting from the one that has recovered pre pandemic levels first: we are talking about China. Covid19 has surely accelerated existing trends for example at the beginning of 202, 202 million users utilized digital platforms for entering into the resale market compared to 183 million of users of 2020, as already happened in western countries. (Bloomberg)Nevertheless, the history of resale is quite different from other places in the world, in fact Chinese consider used clothes as a source of bad luck in particular clothes from died people and so they have for a long time avoided to purchase and sell their old items. During the last decades the trend of resale increased its relevance because of the huge amount of relations with Japan that is an important country for resale and also with other nations of the Asia-Pacific region mixing different cultures and trends and influencing the rise of resale also in China. Data about resale sales in the country are positive with a percentage of 5%, but it is still very far from percentages identified in the US where resale transactions represent the 31% of the totally on a global scale and

Japan that represent 28% of the total amount of resale transactions registered in the world. Secondhand tendency was also influenced by overproduction, indeed about 26 million tons are tossed by people every year, and the consciousness acquired by people toward sustainability and the need of circularity in order to be able to face problems related to sustainable themes.

In China resale market initiatives take place in offline stores located in big towns of the country as Beijing and shops sell luxury goods coming from European nations and primarily from Italy because of their reputation and quality; but also from US for example for brands as Michael Kors because Chinese resellers are able to offer such products at very low prices compared to the ones available in brands' official e-commerce sites. In the following figure we can see the importance of luxury for the Chinese market and also the fact people tend to appreciate the advantages of buying secondhand clothes over new ones, it is evident that more than 30% of total luxury purchases in 2022 will be for secondhand luxury items and in particular for leather products and branded bags.

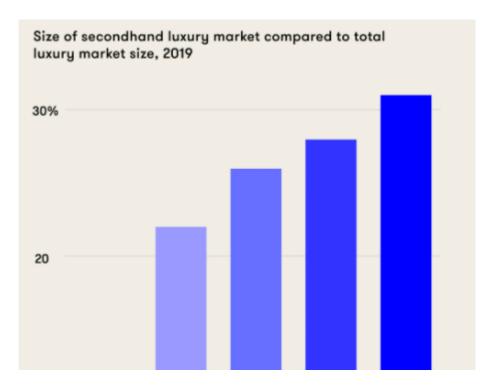


Figure 4: percentage of secondhand lucury market over first market from 2019 to 2022

In 2020 nearly 44% of total sales in the retail were held online in China and the data followed the same tendency for resale transactions thanks to the creation

of some important platforms dedicated to the activity such as Plum and Secoo. (Edition)

The African continent is an important reference for secondhand sales to the point of being considered the main market for the fashion industry in those territories. Today 30% of total secondhand clothes' exports are directed to Sub-Saharan Africa (kci) with Kenya and Ghana considered two of the main African importers of used items, leveraging their economic position over other countries in the continent. About 91.5% of Kenyan purchased used clothes for their needs in 2019 and 90% of Ghanaians did the same. (Edition/cnn)

Donations are an important source for exports to Africa, about 80% of donated clothes are distributed for profit to centers in African countries where items are sold to citizens in local markets. Collection centers in developed countries collect more or less 19 thousands of garments per day with a relevant increase during the pandemic because people were at home and spent their time rearranging wardrobes. Some pieces are sold directly in rich countries in particular to low income citizens and immigrants who send them to their families abroad spending little money, about 3\$ for a t-shirt and 6\$ for a pair of jeans.



Figure 5: the Salvation Army center in the US dedicated to the collection of used clothes

The majority of clothes collected in centers has the African continent as destination, with many differences among countries because some of them have forbidden imports of used clothes as Nigeria while other ones are encouraging the system as a way to create work opportunities and to approach to western cultures, considered very positive by young people. The increase of the phenomenon in Africa is affected by the development of fast fashion production in China: in the past, in fact, those items were produced in the African continent. In this way many people lost their job and started a new business with resale market activities for their survival.

In Africa secondhand sales take place in local markets and brick-and-mortar rudimental shops with few sellers who use social networks as a tool for promotion, e-commerce in fact is not still developed in those territories because of low levels of digitalization and because only few people have a phone with internet connection available. Another method is the one implemented by the so-called "mobile sellers" who move to lonely places in order to sell used clothes to local communities unable to reach markets.

Kantamanto is one of the most known secondhand market in the entire African continent with thousands of people visiting the site every day. Sellers within the market buy every week bales of used clothes from western countries at a fixed price, discovering only at the arrival the content and also the income they can generate depending on the value of clothes within the bales. The site will increase its size and its total turnover in the future because of the increase attention in favor of sustainability and quality of products from western countries; in this way clothes that arrive in Africa are more durable and they can be worn by people for a long time or they can decide to resell those products again, starting implementing circular models also over there. We can say today we are assisting to the begin of a virtuous circle for the fashion industry in new areas.



Figure 6: Kantamanto's market in Akkra (Ghana)

Finally we describe the path of resale market in the US, which is identified as the main place of production of wastes and the main market for resale all over the world with 36 billion of wasted clothes every year. (THRED UP) The total turnover of

secondhand market in 2020 was 27 billion with a constant increase. American decide to buy used clothes not only for economic reasons but, in the majority of cases, to be unique and not to follow current tendencies as a sign of self appearance. The trend is encouraged also by the fact many inclinations tend to come back in few years and so it is more convenient to buy such old products from the resale market instead of from the first market which is much more expensive.

As we can see in the following graph, the most numerous group of consumers is part of Genz with 40% of total clients and Millennials with a percentage of 30%; the data is quite relevant if we think about future tendencies and the importance that companies have to pay over circularity for capturing clients in the market.

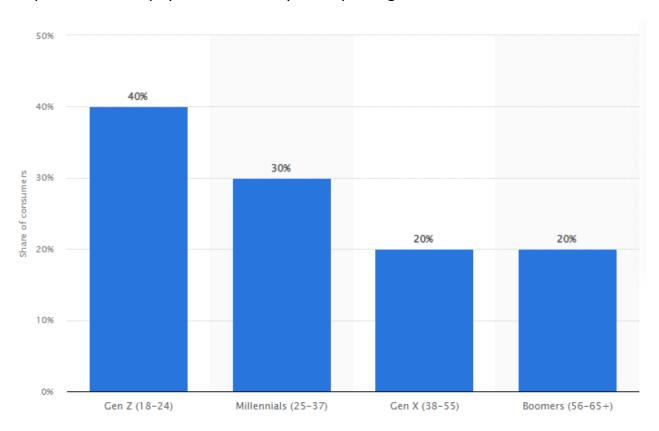


Figure 7: shares of women clients of secondhand market divided by age

In America the growth of resale market is influenced by the rise of many platforms dedicated to the activity where companies but also private citizens can buy and sell fashion items, in this way they can both buy something cheap and of high quality and sell what they do not use in order to earn money and contribute to the increase in the creation of a sustainable world. People can achieve both goals: economic and ethical one. In 2021 online resale market has overcome the offline market and by 2030 it is estimated the first one will double the traditional segment.

At the end of the analysis of resale market trends in three important and very different regions we can say that the evolution of secondhand segment and the way it is implemented depends on the characteristics of the place where the market is located: leveraging the popularity of digital tools in developed countries and maintaining a focus on offline channels in emergent and poor economies as the African continent. Nevertheless the result is the same: a constant increase in terms of popularity and turnover.

#### 1.3.2. THE IMPORTANCE OF DIGITAL TOOLS FOR RESALE STRATEGIES

As we have already analyzed in the previous paragraphs, digital tools are becoming fundamental for the growth of resale market; focusing on the creation of specific online pages dedicated to the sale and the purchase of secondhand products managed directly by fashion brands as part of their e-commerce strategy; or creating independent platforms that exchange clothes of many brands without direct links with companies. Many brands started developing their own resale sites as a way to have a direct control over their products and to know the preferences of clients for used items, in order to identify how to modify supply and value chains also for new products. In this way they can produce what will have a demand also in the resale market to make more valuable products and earn more money. Other firms have decided to create partnerships with resale platforms in order to exploit both the reputation of brands and the ability of platforms to manage such operations, as the one created between Vestiaire Collective and Alexander McQueen.

If we continue the path followed previously for the description of resale market in different regions, we can also define digital tools used in such places.

In the US the popularity of resale has been encouraged by the growth of the platform The RealReal where people can both buy and sell items. In the case people want to sell clothes, the platform has decided to buy directly products paying the income immediately to the person. In this way the platform acquires the property and can do whatever it wants with clothes managing directly future transactions. The direction followed by The RealReal opens the doors to secondhand sales also to people who are not familiar with digital tools because they can decide to create the transactions through online channels or to go directly to the platform's office and hand over clothes there. It has tens of millions of members who create an authentic

community where people share common values and operate for a common aim. The platform has been object of an important growth during these last years and in 2020 45% of clients were new ones who discovered the platform in order to purchase more sustainable and as alternative to fast fashion solutions, in fact the price of a cloth on RealReal is quite similar to prices for fast fashion items. This platform is probably the most known and influential in the US and also in many parts of the globe, in fact alone it has contributed to save 21.801 metrics tons of carbon (The RealReal)(McFashion).

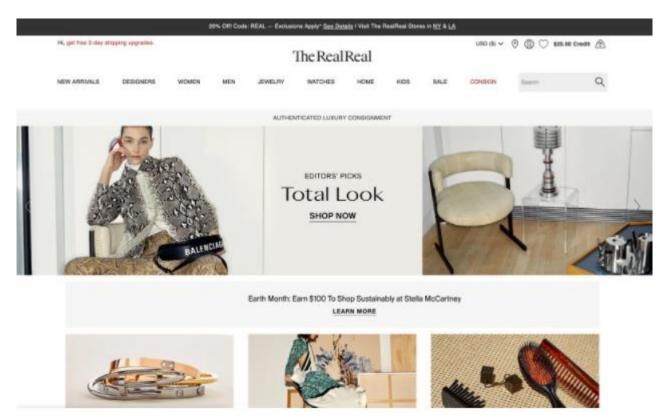


Figure 8: homepage of The RealReal platform

We have also described the path of resale market in China, identifying some platforms which are present in the country and are raising popularity beside other ones that are specific pages part of well known e-commerce as Alibaba dedicated part.

In China many platforms are local and created by Chinese companies because there are many differences between the western systems and the eastern ones with many software not available over there. Global platforms, as the one described before, haven't a big market in the country and China is considered for them a supply market rather than a final one for sales. One of the most known is Plum which was

created in 2017 and is today publicly owned. It is so popular because of its fine systems of control: in fact employees check accurately the originality of products and the authentication of unique codes contained in clothes and fashion items. Another motive is the fact that the platform is an example of C2C market that connects buyers and sellers in a single virtual place with no contacts and eliminating transaction costs. The fact Plum has China as country of origin is very important for citizens who are reluctant about secondhand products because of the considerations about bad destiny and the not knowing about the history and the origin of such products. Another element of relevance is the importance given to virtual opportunities, in fact clients can activate virtual calls in order to see directly products and understand better conditions and life of each single cloth which was particularly appreciated during the pandemic when people couldn't move and also it the method permit the respect of hygienic safety.

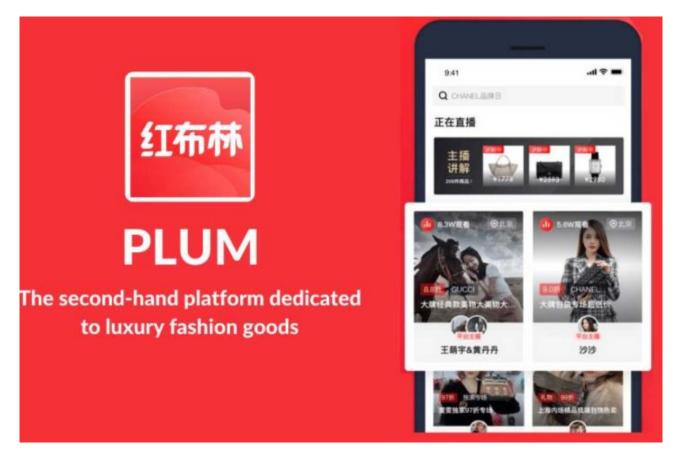


Figure 9: homepage of the platform Plum in a mobile tool

#### **CHAPTER 2: SUSTAINABLE FASHION**

## 2.1. THE MEANING OF SUSTAINABILITY

Sustainability is today a very common term, which has become a trend in recent years and in particular after the spread of the pandemic when people started becoming much more linked and interested to that sphere. In the past the noun was used as synonym of the more general word green; today this last one hasn't got a very important and solid meaning and it has been substituted with sustainability which is immediately in people's mind.

According to the Oxford Dictionary, with the term sustainability we refer to "the use of natural products and energy in a way that does not harm the environment". (Oxfordlearner ditionaries) The noun can assume many meanings according to different contexts but we will focus in particular on the environmental sustainability. This last typology is defined as the responsibility that entities have to protect and conserve raw materials, natural resources and the well being of living being in the world with no differences and inequalities. (Sphera)Today the attention toward sustainable themes has become fundamental for the competitiveness of firms and they should align their profits with a more social and humanitarian aspect. There are also many consultancy companies that focus on the development of specific strategies in favor of more sustainable methods and many firms have also created specific professional profiles dedicated to such activities as the sustainability and the energy manager. In fact, companies that adopt these measures are able to increase their profits because of the reduction in the use of plastics and energy.

In these last years, in parallel with the diffusion of a deep consciousness over sustainability, we assisted to the development of more precise measures as ESG parameters.



Figure 10: a representation of ESG principles

ESG is an acronym for environmental, social and governance corporate social responsibility; these concepts are considered measures of performance in a qualitative and quantitative way for companies but also for financial institutions that base their assessment on such ranks or very similar ones. If we concentrate our attention on the environment we consider the levels of emissions' reduction and how we consume energy and raw materials. The social side is linked to the relation between the main entity and different stakeholders as people and the community. If we consider the theme of governance we focus on the level of fairness, transparency and sustainability targets.

All negative externalities caused by bad behaviors of companies should be blocked or at least reduced and for this reason public national and international institutions should encourage the development of good practices and sustainable practices. For example the European Union has created a mix of norms that compose the UN 2030 agenda in order to establish limits and promote a sustainable development leveraging aspects as the CSR ( corporate social responsibility) and the RBC (responsible business conduct). (Europa)

CSR is today an incisive concept that has to be taken into consideration for the interest of firms in order to save costs, increase reputation and increase banks' favor; but also an important aspect for the society in general in order to base their choices and their values on common aspects guaranteed by public institutions and to have objective benchmarks for the evaluation of different companies.

#### 2.2. SUSTAINABILITY IN THE FASHION INDUSTRY

As we have already said, fashion industry is one of the most polluted over the entire economy and its traditional models are becoming unsustainable for the future. We can also say the pandemic has accelerated this importance and also other important trends that indirectly develop sustainability themes. Being sustainable for companies means align their profits to the welfare of people and the safeguard of the planet. This importance has been increase and today about 70% of companies have inserted sustainable themes as a priority within their future strategies. (Ethernet)

Sustainability methods are surely a cost for companies because the implementation of such methods requires the usage of innovative machines and materials; but it can be considered as positive because of the increase in reputation and awareness the brand is able to acquire. The biggest opportunities of growth for fashion companies come from digital tools implemented both for first and second hand market; followed by sustainability because also clients are paying continuously more attention to such methods and in the third place surveys indicate consumer engagement as a source of success promoting for example experiences made within shops. The pandemic has caused a change in moods and people's priorities giving a strong emphasis on safety, touch less experiences and experiential spaces.

All over the world national governments and international institutions are influencing companies' choices, for example European Union promoted the so-called EU's Circular Economy plan developed in 2021 and that will establish standards that firms have to respect. Another example comes from China were the government promoted recently the so-called Sylar Plan that identify measures for companies to manufacture circular and sustainable. Hong Kong is another case of a country that promoted a plan for the development of recycled materials and the usage of sustainable techniques described in the Bilie System. Also other international meetings have focus their attention on sustainability in the fashion industry, for example COP24 in Poland that took place in 2018 and UN Alliance for sustainable fashion promoted in 2019. The last one was COP26 held in 2021 where leaders decided countries have the duty to maintain global net-zero emissions by 2050 and become, in this way, neutral in order to eliminate not fundamental emissions and sources of pollution; the other point decided by institutions was

about the commitment to keep 1.5 Celsius grade as warming limit. This limit is considered by experts the maximum possible warming for maintaining life sustainable in particular in tropical and equatorial countries were raw materials are produced.

All these regulations are considered of exceptional value if we consider how these ideas were considered in the past. Talking about sustainable fashion, in the past it was an oxymoron because this industry wasn't linked to sustainability anymore. Linear systems are in fact unsustainable because they suppose a continuous production and immediately consumption for a short period of resources.

The expression sustainable fashion is usually compared to another important movement created recently called slow fashion. This last one term comes from the food industry considered the pioneer of such cultural movement; the main purpose is to pays lots of attention on quality differentiating from fast food and junked food. The same concepts are reflected in the meaning of slow fashion as we can see in the following picture.



Figure 11: scheme that represent the mechanism of slow fashion

In the image, that represent the importance in the use of eco friendly materials, we can immediately understand how relevant is the sourcing phase for the choice of

materials which are both ethical and sustainable. For the image related to ethical fashion, the main interest is toward compensation of workers that has to satisfy their almost basic needs and their conditions in terms of time and places. Slow fashion is not only a movement but also a set of philosophical and moral ideas where the core values are not represented by profits but by good working conditions, reduction of environmental disruption and the increase empowerment of workers focusing on long term relations and transparency both in the relation with suppliers and with clients. Another possible solution supported by the slow fashion movement is to reduce the number of collections developed each year buy fashion brands as for example Giorgio Armani promoted after the explosion of the pandemic. Reduce the number of collections has several implications as the reduction in the consumption of materials, transportation costs but also costs and pollution that comes from all events related for example to Fashion Weeks.

All these information about slow fashion, supply chains and sustainable design are important in order to justify the increase in prices of fashion clothes which are green compared to products manufactured in the Fast Fashion segment. Fortunately today clients are much more interested and sensible to such themes and are becoming ready to pay a premium price for purchasing products with higher quality and more durable, thanks to the materials and the techniques used for the production.

#### 2.2.1. SUSTAINABLE SUPPLY CHAINS

In the 1990s fashion companies started a new tendency toward off shoring in order to manufacture abroad in emergent countries where brands could exploit low regulations and low wages for workers. Each product ran many miles from the place where fibers were created to the moment when articles arrived to the final client usually in developed countries. The method was implemented both by fast fashion companies and also luxury ones where the design phase was managed in the home country and manufacturing ones were produced in poor countries usually in the Far East and Sub Saharan nations. Global supply chains are very complicated to be managed because of long distances among all the phases of the production and sales process but also because of differences in all the stakeholders part of the network. The distance is a key factor primarily considered the geographic aspect because firms have to consider logistics and transportation in terms of costs and time; for example when a company face the American market delivery times are

particularly important because clients consider the variable as one of the most relevant for their purchasing decisions. The second consideration is linked to cultural distance because actors distributed all over the world have different habits and cultures which are reflecting into diversified customers' preferences and also cultural trends; the risk is that a company produces an important amount of clothes who are trendy for some countries usually the ones located near the headquarter or near the nation where the design phase is developed while they can remain unsold and not appreciated for other countries that have different cultures and habits such as Muslim countries or the Eastern ones. Another relevant point of discussion is linked to administrative distance because the movement of goods between countries which are not part of common economic blocks can be very hard to implement because of bureaucracy and restrictions.

The pandemic has emphasized these last elements of restrictions in the movement of goods and people; after the first explosion at the beginning of 2020 the entire world was blocked developing disastrous consequences for companies. Luxury brands in the fashion industry faced the problem of closures of people's trips because majority of their incomes were generated by duty free stores located in important airports and purchases made by tourists in touristic countries as Venice. The sudden block of travels caused the increase of inventories and the reduction of sales because such luxury items were not sold online as it happened for other segments; there are only few brands who have been able to exploit digital tools for selling also luxury for example with the insert of their collections in gaming platforms or showing collection in their social network's pages.

Fast fashion segment faced also negative consequences in terms of sales and profits, these brands started the crisis even before the explosion of the pandemic in their home countries. In fact they produce all items in emergent countries where Covid19 had already exploded at the end of 2019 and restrictions started at that time. According to the evolution of the pandemic, fast fashion companies faced a shortage of collections in developed countries when shops over there were still open or in other cases their articles were blocked all over the world waiting for the elimination of restrictions in such countries located during the trip of goods from factories to final stores.



Figure 12: an example of global supply chains

In the map we can immediately see the complexity of global supply chains and also the difficulties of managing them during the pandemic. This tragedy has encouraged many companies to think differently about their chains and re-design their models and strategies. The two main solutions adopted by fashion brands were nearshoring and reshoring. The first one means the transfer of activities in a country near the home country located in the same region or in neighboring nations; while the second one means the return of the production to the home country of the company. Both solutions are relevant trends for the future, in fact 71% of fashion brands are planning to implement nearshoring strategies by 2025.

Near shoring and reshoring cause an increase in flexibility which is a crucial variable for the competitive advantage in the actual arena. These methods allow companies to reduce time required for the delivery phase and also design can be a more ongoing process adjusted in the course of the season in order to adapt to clients' preferences. Efficiency is also linked to the development of sustainable supply chains because companies using both the trends can produce even more and in a more sustainable way. This first aspect is indirectly linked to sustainability in the sense the production sites located near the final market decrease transportation costs and oblige companies to adopt fairer processes and respect striky regulations in terms of emissions and working conditions.

Reshoring and near shoring are very important not only for companies but also for the society in general because they reduce pullution's levels on a global scale; fashion companies are in fact responsible of the majority of pollution created in poor countries. Emissions are very high and also water pollution achieve maximum levels because dies and chemical agents implemented for the production are not collected and disposed correctly, instead they are freed in water rivers polluting the entire ecosystem. Negative consequences are present also in the food industry and in people's health because they eat polluted vegetables but also they wash themselves into dirty water causing problems for their bodies and internal organs.

Methods described before bring to negative consequences for local communities in poor countries, because with reshoring local workers lose their job and their unique opportunity to survive and to build a dignified life for them and for their families. Fashion companies usually underpay workers and can maintain low prices because of this decision of reduction of labor costs and exploitation; in fact in many cases people work many hours a day without being paid for all what they do and working without the respect of safe conditions. International organizations intervened in favor of fragile people but unfortunately the high levels of poverty make fashion companies very strong over workers and so they are obliged to accept their conditions because the alternative is to remain without jobs and in conditions of misery.

Nowadays companies are thinking more about possible and sudden events than can occur in every part of the world as the pandemic; and they have directly suffered about negative consequences of such black swan episodes. These feelings have been crucial for the emergence of the interest toward localization and flexibility in order to be ready to face all possible future events. A support to this theory was shown also in March 2021 when the container ship Ever Given blocked the Suez Canal with an immediate block of trades and supplying all over the world. All these events demonstrate how fragile global value chains are and the importance to start thinking more local and more flexible in order to be ready to change immediately strategies. Fashion brands are opening continuously new production sites in countries located near the home country and in particular in Turkey which is considered the new factory of the world, as China was a decade ago. Hugo Boss for example is moving 40% of its production within EMEA countries with the main one built in Turkey; in this way companies can reduce overproduction and start their manufacturing after seeing new clients' trends. (Voguebusiness) American fashion brands changed also the location of their production sites moving from the Far East to Mexico and Latin America, where they can both obtain a price advantage and also a closeness to final markets; we can say the majority of American brands are developing near shoring strategies.

The shortening of global value chains has been due also to some managerial errors that occurred because managers are not able to manage so complicated value chains that are spread all over the world. Also people's ideas are relevant for the move toward more local value chains because they are interested in products made in western countries leveraging the so-called "Made in" effect.

The need for companies to start near shoring and re shoring is also due to the birth of many startups located in developed countries and with very short value chains, which are able to manufacture according to customer needs in a sustainable and fast way. In order to face the competition of these new entities, incumbents had to modify their ways of production and their retail systems.

Re shoring and near shoring have been encouraged also by an elevate use of machines and automatic processes with the manufacturing phases; these innovations require the presence of innovative machines present in the majority of cases in developed countries and also the need for companies to hire qualified workers specialized in IT and new technologies who have to be well paid and empowered. These professional figures are mostly available in richer countries where there are technical schools and universities able to train such workers.

#### 4.2.2. THE USE OF ORGANIC RAW MATERIALS

The fashion industry is the fourth most polluting sector in terms of consumption of raw materials and plastic particles, mainly polyester. It is estimated that 70% of emissions comes from the production phase and in this sense the use of organic materials can dizzyingly reduce these amounts. The data make people reflect about the consequences of their purchases and the importance that choices can have in terms of sustainability and circularity. In the world 25% of global water pollution and 23% of the total amount of insecticides is used for the fashion industry, these numbers oblige companies to intervene and change their models. (Lifegate)

A trend followed by many fashion firms is related to the usage of organic raw materials so companies intervene in the first phases of the value chain. With the expression organic raw materials we refer to all fibers which are natural so without being treated with pesticides and that have been manufactured with low impact processes. Some of the most used natural fibers are hemp, linen, bamboo and nowadays we are analyzing companies that are implementing the usage of food wastes such as oranges and ananas as we will see in the following chapters.



Figure 13: example of cultivation of organic plants in poor countries

Another important consequence of the use of organic yarns is that they have very positive effects over allergies: clothes are hypoallergenic and free from plastic microfibers so they have no consequences for the skin in particular for fragile people.

Be sustainable, which is a synonym of organic in this case, means produce items only with 100% organic fibers and not partly with such yarn and partly with classical one; the first step for the achievement of this classification requires the respect of sustainable agriculture methods. A relevant discrimination between classical and sustainable agriculture depends for example on the use of rainy water for the irrigation of lands. In this way farmers can receive more incentives by institutions and reduce the use of water by 71%.

Organic materials have a positive impact also for the disposal, in fact these typology of fiber is biodegradable in this way at the end of their lifecycle they have low

impacts over the environment and it is easiest to change their usage developing new materials or new products from the same yarn.

The usage of these innovative materials changes indirectly the entire process moving from a resource-intensive one to new models characterized by the use of science and automation for the making of products and also of raw materials, these new systems allow companies reduce wastes and polluting agents.

Important brands have created specific partnerships with new startups in order to develop more sustainable models and improve their green identity over the entire industry. A relevant example is the collaboration between Salvatore Ferragamo and Orange Fiber for the collection launched in April 2017 in the occasion the Earth Day and completely realized with wastes of citrus-fruits.

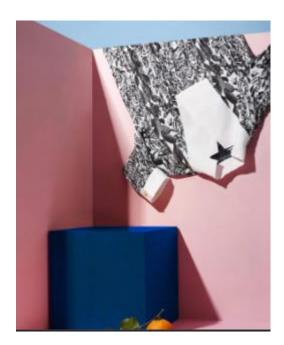


Figure 14: a product realized using the natural fiber and part of the collection

Orange Fiber is born in 2014 in Catania and its core activity is the realization of fibers for the fashion industry in a completely sustainable way, starting from what remains from citrus juice production. They operate the first phases of the process in Sicily, moving after in Spain and coming back to Italy for the end of the process, in order to leverage the made in Italy and the fact it is possible to match sustainable design and cultural heritage of the Italian background. This trend is increasing its popularity also in the fast fashion segment with brands as H&M which are implementing the use of such materials. The fact the use of citrus- fruits wastes is increasing its popularity in Italy, comes from the fact our country is one of the

biggest producer of such juice all over the world and so there is an high demand and as consequence high levels of wastes which are very costly for being disposal both for people and environment.

This new fiber derives from Pastazzo which is the remaining substance from oranges; and it is transformed into usable fiber in Spain; after this phase yarn returns to Italy and it is utilized in the fashion industry for future creations. About 700.000 tons of Pastazzo are transformed into fiber every year from the extraction of cellulose. (76) In fact, the beginning of the process take place during the extraction of cellulose, which represents 60% of fruits. The fiber they obtain from the process is similar to silk and it can be colorful or printed; important brands describe such material as a luxury and sustainable one because differences with natural silk are very small and people appreciate a lot this aspect because they can wear something good for the environment remaining trendy and emphasizing the Made in Italy origin because nowadays people consider increasingly we are what we eat but also what we wear.



Figure 15: an example of the textile from orange wastes

## 2.3. THE RELEVANCE OF CUSTOMERS IN SUSTAINABLE DECISIONS

Sustainable fashion is surely a new trend that will become the predominant segment in the future because people are paying constant attention toward such

elements. Today sustainable attitudes are considered by majority of clients as a predominant variable for their purchasing decisions, among all them the most important ones according to McKinsey surveys are:

- Sustainable materials: as we have already described in the previous paragraph, raw materials are fundamental for the determination of the appellative sustainability because they make the final product recyclable or at low environmental impact;
- Working conditions: when we consider sustainability, we refer both to the environment and the sociality; this last element is relevant for people in particular nowadays when for clients the respect of working conditions and of a sufficient salary are primary needs. This aspect has been leveraged by many associations and companies that operate in Asia which was the factory of the world until few years ago; over there people are considered as objects and submitted to multinationals' power. When we refer to working conditions we refer to all phases of the entire process starting from the cultivation of raw materials also in developed countries: for example the cultivation of organic cotton is positive, surely for the environment, but also for people who operate in those fields because they are not in contact with toxic substances and because their conditions are respect and full of dignity in coherence with the main values of organic and biologic cultivations.
- Local culture: this third aspect is considered by customers very important because they are increasing continuously the importance of localization and the respect over local communities. New brands and sustainable startups, in fact, leverage this final aspect because the entire process is held near the headquarter and each phase is close to each other; in this way companies respect local cultures.

Clients is a general noun that identify all people who buy something of a specific brand and that they can be new ones or loyal ones. For a more clear classification and a better and more detailed analysis of possible optimal strategies, companies are dividing their customers into segments based on their age. This basis is one of the most useful because the tendency toward sustainable purchasing decisions depend of the age and achieve maximum levels for GenZ and Millennials. About 43% of GenZ is paying attention to sustainability and is leveraging the reputation

of companies depending on the level of sustainability developed in the production and retail process. (Mckinsey report)

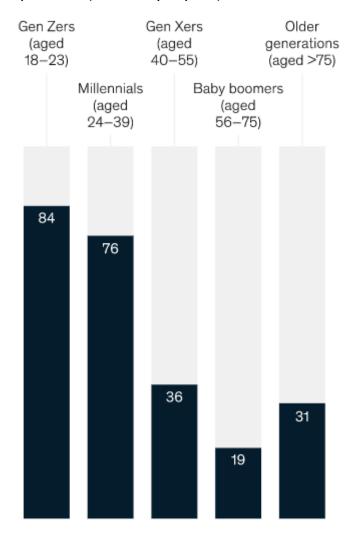


Figure 16: people using online channel (source McKinsey Report)

The previous picture represents the percentage of people part of each segment that utilize digital tools for their purchase according to McKinsey survey. As we can see the majority of online clients is part of GenZ and Millenials and this fact can be surely a justification to the increasing importance given to such tools for the increase in reputation and also for leveraging their competitive advantage.

GenZ is preferring new and lesser-known brands than consolidated ones because such firms emphasize values as the sense of appurtenance to a community and the sharing of common ideas. Startups usually create communities within specific blogs or with parts dedicated in social networks; these communities are important in the sense people can communicate about new trends, they can give advises but also they are able to sell and buy secondhand products, leveraging at maximum levels

sustainability. Tools utilized are popular also because of the increase importance of digitalization and the online channel, as we can see in the picture analyzed before: clients exchange information about clothes and they can immediately transform the conversation into a purchase in the online site. Majority of new brands, in fact, have created their social network pages simultaneously with the birth of the brand itself in order to make them visible and popular but also as a sign of transparency. Some companies have created also few temporary shops in order to show their collections and they are basing their stores on the sharing of values and the possibility to try in first person experiences for the demonstration of how the entire process is managed and the sources of materials also with direct links and images that represent such origins.

In 2020, 43% of all clients are online ones and evidences have also emphasized this aspect can have positive externalities also for the environment reducing energy spent for offline stores and also pollution created by transports for moving clients into shops. People are considering more the quality of the products and their value than the price, for this reason sustainable brands are able to remain competitive also over fast fashion companies. This last segment has also to adapt to new trends and new models within the sector in order to maintain their market share; brands as H&M and Zara for example are introducing the use of organic cotton or nearshoring strategies in order to face actual challenges.

If majority of clients is in favor of sustainable purchasing decisions, part of them are continuing to sustain the limits of such products and companies. This negative attitude is due to, in part, a lack of knowledge because brands are promoting such initiatives only toward digital channels eliminating some segments from information. The use of both digital and traditional communication could be a possible solution for brands to capture new segments of clients for example utilizing advertising campaigns promoted in magazines or creating pop-up stores also temporary ones in strategic positions for workers or tourists. Another element of contestation used by opposites to sustainable fashion is the lack of variety because for them sustainable companies offer few models and with few variables compared to linear ones and also at higher prices; if there would be more information the explanation could be that few assortment is justified and fundamental for being sustainable and eliminate

wastes or overproduction. Finally they believe those items are limited in terms of trends and so they are not able to match their preferences even if fortunately, thanks to the increase of sustainable fashion, all brands both luxury and fast fashion are increasing available models.

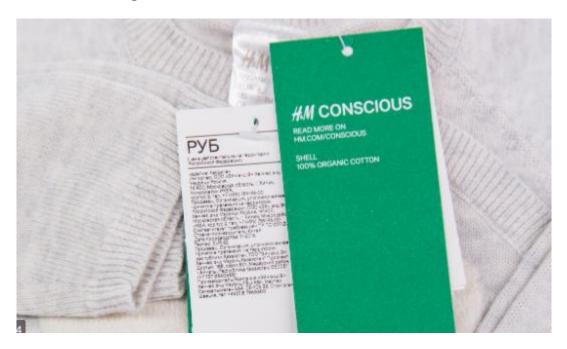


Figure 17: an example of fast fashion sustainable articles (h&m website)

## **CHAPTER 3: RECYCLING AND UPCYCLING**

### 3.1. RECYCLING STRATEGY

The word re-cycling is today an hot topic for almost all developed countries because of continuous striker regulations and a change in people's mind; they believe sustainability and environmental topics are ones of the most important for next generations and the near future.

The linguistic meaning of the noun recycling is described as the operation made by companies or institutions of converting wastes into materials that can be used for the same scope or for different ones. The result is, in many cases, related to an increase in the lifecycle and so a reduction in the production of new items because of a major exploitation of old ones. Talking about this new trend we can say it allows a reduced amount of wastes that every year are sent to landfills for their disruption, creating lots of pollution and an exponential growth of exploitation of both soil and raw materials. For this reason we can surely say that the conservation of natural resources is another relevant reason of the increasing tendency toward recycling processes. The last one is always related to the saving of energy and in particular the reduction in costs because with recycling, materials can be used again limiting the amount of time and resources that are used for new productions starting from nude fibers.

Recycling is considered the trend of future in almost all sectors; people are today familiar with the recycling of their domestic wastes or the purchase of secondhand cars, while they are more estrange toward the purchase of other kinds of objects as clothes or furniture for example. This is because in the past people considered such operations as part of daily routine of poor people or as a sign of poverty, while today it is the opposite one; in fact new generations appreciate a lot people and brands who operate in this way posing attention toward the social and the environmental side of their business.



Figure 18: trends over recyclable and not recyclable products

In the previous image we can see two opposite trends: the one represented in the red line refers to the decreasing use of not recyclable materials in the production while the green line is referred to the growth of the use of recyclable materials: starting from nude fibers to entire new final products that are used for new productions or for the upgrading of the same item into new versions or into products with more modern functionalities.

Important institutions have recently introduced new regulations in favor of the increasing development of recycling strategies in countries. The European Union has created the so-called "European Green Deal"; this directive has the scope of reducing all net emissions of gas until 2050 and achieve the result of reducing them of 55% by 2030. The so-called Green Deal has also the aim of reducing the economic growth from the use of resources and making such growth independent from such elements in favor of more sustainable models and new programs. One third of 1800 billion of euro utilized for the Next Generation European Union program is destined to sustainable activities part of the Green Deal. (Ec.Europa)Another important initiative promoted in favor of recycling is the "Waste Framework Directive" promoted by the European Union in order to make clear rules for what concerns wastes and align all companies toward common objectives fixed up to 2020 when the directive impose the achievement of a reduction of wastes by 70%; finally in

2025 the European Union has the objective of reducing wastes and increase recycling of all municipal wastes.

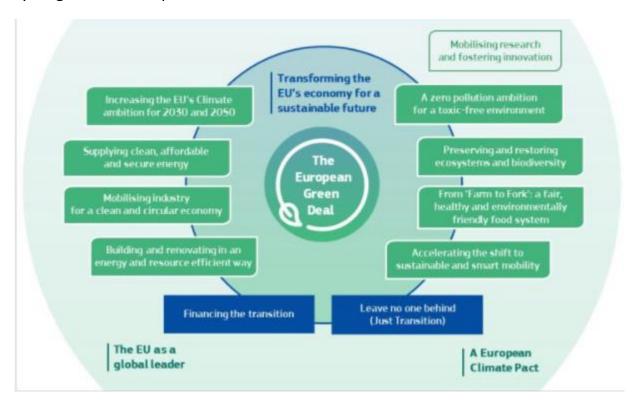


Figure 19: the policy of the European Green Deal

If we analyze the data about the amount of wastes recycled within European countries, we immediately understand the necessity of all these initiatives implemented by national and international institutions in order to make the future possible and sustainable for new generations. Today in Europe only 38% of the entire amount of wastes is recycled while the other part is sent to landfills immediately after the first use. (Ec.Europa). Data are even more dramatic in other parts of the world as the Far East and Latin America which are also the area where developed countries dispose of their wastes. In Europe 60% of wastes are sent to landfills not only because recycling is not so developed, but also because there aren't the necessary techniques and infrastructures able to make such processes possible.

Recycling activities can be both internal and external: in the first case a company recycles wastes from an internal process and utilizes them for the production of a new and same item; while in the second case external recycling means utilize materials that otherwise went to landfills for new productions. Both cases are relevant for value chains because they allow the increase in lifetime of almost all

products, reducing in this way the contribution to the increase of pollution. In the fashion industry the recycling segment has obtained a turnover of about 5.6 billion in 2019 with a CAGR of 3.6% in the period between 2020 and 2027. (Alliedmarket)

The starting point of recycling strategy is determined by the procurement of raw materials or old products that can be recycled; this preliminary part of the process can be developed in different ways and also using different actors. For example donation is a real possibility because many people utilize for example bins for the collection of old clothes that are after sent to poor countries for reselling activities or are used by companies for new productions. Companies can also choose to create specific campaigns for example exchanging the collection of old clothes by people with a credit given to them for the purchase of new items: in this way firms can exploit what can be recyclable from old and no more utilized companies and incentivized the turnover of the company encouraging clients to buy in order to use the credit received. Calzedonia group for example every year promotes in all his shops the collection of used clothes; the group from 2011, when the campaign started, has collected more than 2.000.000 kilos of products destined to the recycling that otherwise would be addressed to landfills.

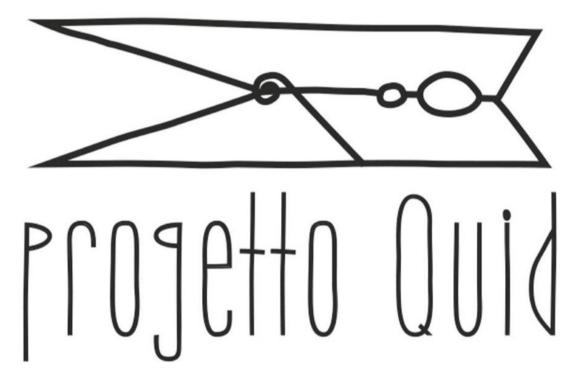


Figure 20: the logo of the campaign

In the previous lines we have seen that today important companies, as Calzedonia group, have created specific campaigns for the promotion of recycling. The trend has faced in last years an exponential growth but its origin as economic activity can be dated to the 19th century in England. In that time very poor men called rag and bone man collected unutilized products from towns and households and sold them to merchants who brought such items all over the world for trades. These people were part of the poorest social classes within the society and so they were seen by people as obliged to do those recycling activities; this is an explanation for the negative opinion many people have still today about recycling. This sort of job lost importance and popularity during the 20th century because of mass production and an increase in the purchasing power of people also from low social classes. Today the same economic activity has increasing again its popularity using different methods and technology and also for different scopes because companies, for example, do not make similar processes as their core business but in order to obtain a prestigious position over competitors and clients, but also for exploiting incentives and for reducing costs of raw materials and energy.

We have seen how positively can recycling impact social and environmental situations of this time, but unfortunately there are also some problems and negative consequences that recycling can cause. All these activities take place mainly in developed countries because of techniques and physical places where operations can be implemented, but also because of human skills that are necessary for the development of specific programs and processes able to convert unused items into new ones. For developing countries the situation is very complicated because of the invention of techniques able to make recycling possible and easy to be implemented. In fact, poor countries have been historically the so-called firms of the world able to produce the global quantity of items which is necessary for the satisfaction of people's needs because of cheap work and because of the presence of important sources of raw materials exploited, in the majority of cases, by multinational corporations. Today with the growth of recycling these countries have faced an important decrease in their production rates and as consequence a decrease of employment rates and an increase of poverty. For the future, companies located in developed countries should transfer their strategies and their plants dedicated to recycling strategies also in developing countries, where they have exploited people and source for many years, in order to help economic conditions and as a sign of reconnaissance for the time they have exploited local citizens and natural soil.



Figure 21: rudimental forms of recycling in developing countries

The increase in popularity of recycling is limited also by other factors that occur surely in developing countries but that can be present also in rich countries as European or North American ones.

- Fragmented infrastructures: this fact is important because in some situations companies have the ideas and the strategies ready to be implemented but they do not own specific plants and infrastructures for the concrete transformation into recycled materials and final products. This is because peculiar operations are very precise and difficult to be implemented and they require specific machines and places for the realization for example very large ones and located near collection spaces in order to reduce both energy, raw materials and pollution coming from transportations.
- Downgrading of recycled materials: the other aspect that affects the growth of recycling as a trend depends on the psychological part of human being. Many people, in fact consider recycled products as with lower quality or as an item dedicated to poor people who are not able to purchase the same new product, as it was considered in the past. Today fortunately younger generations are changing their attitude toward recycling and are developing a strong self-consciousness about the importance of environment also thanks

- to the use of social networks and young influencers who are helping these cause as for example Greta Thunberg.
- Growth of fashion mass consumption: this thesis is focused on the fashion industry and recycling is very close to such sector because of the amount of pollution caused by fashion every year all over the world. In this sector an important issue is linked to the exponential growth of fast fashion productions within the sector; this segment can provide trendy clothes at very low prices utilizing completely unsustainable processes and very polluting value chains because for example production is located very far from selling places. Prices and offers have negative impact on the diffusion of recycled or secondhand clothes because at the same price people prefer buying new items even if they are unsustainable. The decision is driven also by the fact the range of recycled fashion items is very limited so it is difficult to find that people desire; in fact only 15% of all consumer clothes are recycled today. (81)

### 3.2. UP-CYCLING STRATEGY

Up-cycling is a new word that has become increasingly popular in recent years because of the propulsion of customers toward a more sustainable and of an higher quality world. Many people have the tendency to exchange the two terms: upcycling and recycling but they have a difference; in fact with upcycling techniques the new product has been converted from wastes or in other cases it has a better value in terms of price or in terms of environmental benefits that it is able to generate. The word has been created in 1994, when a mechanic engineer described the need for the future of creating something more valuable from existing items using the word Upcycling. It has been utilized for the first time with the actual meaning by the businessmen Gunter Pauli in 1998 referring to the creation of new valuable products from wastes and became an everyday word from 2002. (Recoverbrands)

Up-cycling is a real design style because it is not something that can be implemented by companies in few time; in fact it requires a specific projection and specific techniques able to transform wastes into valuable products than can be sold in the market and that can be competitive for final customers. Companies can develop two mechanisms of doing up-cycling within their business: the first one is the so-called pre-consumer upcycling that occurs when firms utilize wastes of materials that have

not yet been sold to clients; while in the second case companies decide to follow a post-consumer upcycling strategy, in this way they utilize old clothes that are modified for the creation of new ones without decomposing them into elementary fibers.

Many companies started thinking about up-cycling models also because of changes in customer needs who prefer more sustainable products and pay lots of attention to the durability of items and the possibility to utilize them instead of put them into landfills. Firms that start producing using upcycling methods usually have to reconvert their entire lines; for example they have to use specific machines able to convert wastes into products or able to disassemble pieces into elementary components. We can say that up-cycling is the new frontier in terms of business models that are developed by firms all over the world and in particular in the developed one where skills and infrastructures are adapted to such methods. The majority of companies that start implementing these techniques are of a small or medium size because they do not focus on economies of scale and also because they do not have enormous plants full of fixed costs they are obliged to absorb. On the contrary these sizes of companies are more linked to an idea of quality of products and they give lots of attention to processes and values transmitted within the supply and the value chain. For example creativity is a crucial aspect because they have to generate an income exploiting important variables as the originality, the quality and the transparency of their processes.

Donations are a relevant source for companies because they can exploit these wastes in order to make new valuable products; for example they collect old and exploited clothes from clients and use them for new, more valuable productions. It is estimated that about 35% of all donated clothes are transformed into new items which are generated and launched again in the market. (Cbi).

Up-cycling techniques can be applied to old clothes both partially or completely: in the first case designers operate a minimal change and an incremental transformation to the original product; in fact it is still recognizable and it can be linked to the original one only adapted to new trends and new preferences launched by the market. In the second case, the original clothes are completely changed and the old item is not identifiable, for example when a company transforms men clothes into children ones or into items useful for their home. It is difficult to create

such transformations because, in particular old clothes have not been projected for their reutilization and so materials, colors and sizes are not easily transformable.

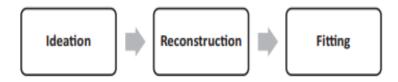


Figure 21: up-cycling process

Up-cycling is a trend that has been increasing its popularity among all fashion segments: from fast fashion to luxury brands and these last ones are particularly hidden and have been obliged to change radically their models. In the past consolidated luxury brands as Hermes have burnt their unsold models in order not to compromise the reputation of the brand for example selling clothes at a discounted price. Today the situation is evolving and the reputation of the brand is proportional to its capability to reuse and limit at maximum level its wastes. In many cases luxury companies create specific collections composed of few models and launched only in specific regions in order to make such products desirable and valuable for clients who are looking for unique and original pieces. It is the case of the MiuMiu collection launched in 2020 composed of 80 pieces designed utilizing vintage products of the brand that had been remained unsold for a long time and that were ready to go to landfills. (Staymagazine)

The trend is becoming very popular within the sector because of its actual turnover and its growth margins that are continuously increasing; in 2022 important fashion designers are designing totally dedicating their catwalks during the London Fashion Week to their up-cycling collections; focusing on the changes of the sector and their ideas and trends for the future of the fashion industry, concentrating on the values and the attributes of the products and not on the amount they are able to produce or sell. Quality is much more important than quantity for the total turnover of companies.

Advertising is indirectly another way found by companies to adopt up-cycling methods because they are able to promote clothes and the values they transmit without using materials, spending energy or exploiting natural resources. Many luxury brands decided to promote their clothes in the gaming industry as a sort of met averse world. Characters from videogames wear branded clothes in order to

encourage fans buying such products; while for companies it is an occasion to propose new ideas without spending money for the launch in surrounded areas of their markets all over the world; companies can propose their lines to the entire world in a sort of virtual showrooms plenty of new generations who are the clients of the future.

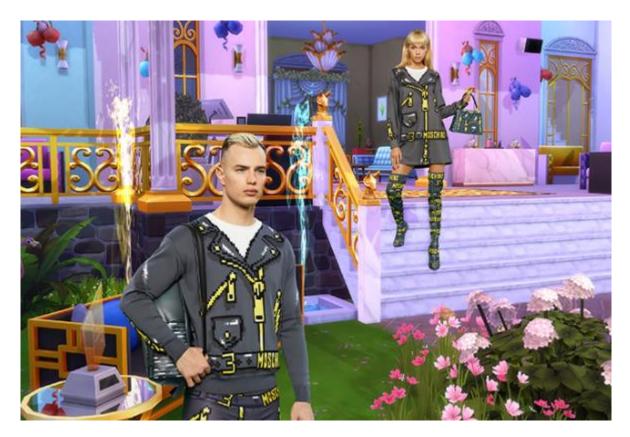


Figure 23: Moschino clothes for the videogame The Sims

As we have seen previously, up-cycling has been encouraged by the pandemic and today with the crisis we have for the finding of raw materials is still very important; in fact it reduces the dependence of raw materials from foreign countries leveraging local production and local enterprises. With this new business model, companies can purchase unused clothes from customers and utilize them as the raw material they need for new productions; reducing also production costs and transportation costs that are very high because of increases in fuel prices. It is a crucial opportunity for small and local companies because without such methods they will not survive and will not be able to face such exponential increases in so few time.

## **CHAPTER 4: CASES STUDIES ANALYSIS**

In the previous chapters we have analyzed future trends in fashion industry, mainly circular models and sustainable themes. Many traditional brands have changed their business models in order to remain competitive in a new arena where price is no more the main competitive element. Simultaneously we assisted to the birth of many new brands that leverage the aspects already mentioned and that can collaborate with more historical companies in order to create strong partnerships and encourage the growth of these new models, which will become the dominant ones in the future.

# 4.1. FLORANIA CASE

Florania is a very young startup founded in 2021, in the middle of the pandemic, and concentrated on the ready to wear segment based in Milan. The founder is Flora Angela who experienced past jobs in important fashion brands as MiuMiu and started thinking about a new brand that included all the main values for her, encouraged by the increase in her free time during the pandemic.



Figure 24: Florania's logo

Observing the previous image, that represent the logo of the startup, we can see above the brand name the image composed of a strange flower. It symbolizes the re flowering of new ideas and of a new way of doing business for companies; flowers in fact represent a sort of renaissance for an entire sector. The company is based on some strong inspirations from different cultures all over the world: post-punk aesthetic, mythology and traditional Japanese manufacturing.

The brand entered "The magazine sustainable brand platform" last August as one of the emergent most sustainable cases; the magazine is very important and also recognized by United Nation as a nice example of project that accelerates sustainability. It has been rated by Brand platform with 5 points over 6 for what concerns the level of sustainability; in fact its core values are based on such ideas and models.

The company's value chain is almost completely held in Italy excepting for the packaging phase with a strong attention toward the environment and toward people. Workers are considered part of a community where everyone can demonstrate its skills and express its own ideas. The organizational structure chosen by owners is characterized by an horizontal hierarchy where everyone has the same power and the same importance. The firm donates to its employees wastes in order to minimize losses and increase the satisfaction of collaborators. They work together and help each other in developing continuously new models and new techniques for the increase of company's sustainability levels. They respect also the social aspect of sustainability, in fact they donate 15% of their revenues to the NGO "Medici Senza Frontiere" as an help for their projects in poor regions of the world.

They developed a completely new model starting from the design phase; in fact they collect wastes, vintage pieces both purchased or donated and recycled materials; after this new beginning they analyze available products and start design new possible items for the sale. In this case design is not the first phase but it follows the research of materials phase. For these reasons all clothes are unique because each source is different from the others; they are completely vegan so they respect also new cultural trends; but also season less and genderless. The company's growth is leveraged by the strong use of rhetoric implemented, for example their use of social networks as an important channel of communication and promotion. Each new product is described in detail in their Instagram and Facebook page, analyzing all the

materials used for the production. For what concerns traditional advertising, they utilize recycled paper similar to vintage pieces.

All products of the company are composed for a 70% of organic cotton and for the other 30% of recycled materials, mainly cashmere and jersey. The first typology of material is certified by GOTS (global organic textile standards) providing a qualified certification for clients about what they are purchasing. For example the "Boro Kimono" which is created from re-woven cotton; the name has also a symbolic meaning in fact it refers to the Japanese word boroboro that means something repaired. Other upcycled and organic fibers come from algae, bamboo, and coconut fibers.



Figure 25: the Borokimono produced by Florania

Considering the second category, upcycled cashmere is used in many products because of all negative externalities and exploitation that such production is causing in South Asia. They capture pure cashmere fibers from what they are able to find or from what they receive as gift and reuse such materials for the creation of unique and original pieces.

#### 4.2. VITELLI CASE

Vitelli is an Italian brand born in 2016 thanks to the collaboration of Giulia Bortoli and Mauro Simionato, who were already fashion consultants for consolidated

brands. Their production is located in the Veneto Region where they collaborate with local artisans and in Milan, mainly for the communication and promotion side encouraged by the establishment of Vitelli Studio used as showroom and sales point. The brand is specialized in the knitwear and it is a sort of paradox because this production is very old and traditional but Vitelli started changing this concept and structuring new models of knitwear: more original and unique.

Today it is considered one of the most international emergent brands thanks to important collaborations with other foreign emergent companies located in New York, Paris and in the Middle East. It has been present in specialized fashion magazines, obtaining the cover of Vogue in January 2021 and consecrating in this way its awareness as one of the greenest successful brands. The presence in international magazines encouraged also collaborations with foreign brands for example with the New York based brand Barragan and with some local Brazilian and Nigerian companies. The firm was able to achieve such important results because it has considered sustainability more important than volumes and turnovers since the beginning.

Their products are originated from the story and the ideals of the youth cosmic movement born in the 80s in the North of Italy and in particular thanks to the club "Cosmic" in Lazise (Garda Lake). Clothes are original and self-centered so premium prices are justified by the style and the quality of such items. (Lampoonmagazine)

The production process is managed by Vitelli with the involvement of a network of local artisans and knitter mainly from the Veneto Region; everyone is highly specialized and rooted in the territory in order to exploit the local know-how of districts. This process has been very important also for the local economy, many local producers had lost important jobs during the 90s because of delocalization of production in the far east in order to exploit lower working costs. In this way artisans accelerated the recovery of their past volumes of production and the trend is estimated to grow in the future because of the constant attention toward local and regional supply chains. They consider themselves as carbon emission-free because of their short supply and value chains, in fact they produce near their offices and headquarter and sell also there in their stores or trough the online channel. The unique sources of pollution come from transports used for the collection of yarns and energy utilized for the working of machines. They also

decided not to use plastic for packaging and paper for advertising concentrating their efforts on the digital promotion of collections.

In the following picture we can see an example of Vitelli's products created with the use of their own material called Doomboh which has been the main element of distinction of their collection since 2019 in the international arena of emergent sustainable brands. The material is an hybrid one produced from reclaimed yarn created thanks to an innovative needling process and exploiting wastes from Vicenza knitwear and giving a tailor-made look. It is a way to produce "new" fabric from already produced yarn; for this motive the company produces very few pieces for each model because they can use only what is already existing.



Figure 26: products created with DoomBoh material

As we can see from the image, products created with Doomboh material can seem very elementary and with nonsense but people should discover their deep meanings and their roots, in fact they are similar to organic creatures which reflect video art works of the 70s and 80s. Today these manufacturing are particularly appreciated because consumers are looking for original clothes that distinguish themselves from the others and that represent their self consciousness.

## 4.3. SALEWA CASE STUDY

Salewa is an Italian company founded in 1935 and part of the Oberlap group based in Bozen. The symbol of the company is an eagle which represents the quality of its products and the strength of performances. The firm is headquartered in Italy but it produces almost completely abroad: 37.7% of production is located in Europe, 61.7% is based in Asia and 0.4% is produced in Africa and South America; the decision to locate production in different places has the purpose to adapt better to local circumstances and preferences and to be very close to final clients. Today the group has 703 employees and products are sold in 236 monobrand stores spread all over the world. (Salewa)



Figure 27: Salewa's logo

They manufacture outdoor clothes and footwear in particular for mountain sports and the nearness to Alps, where the headquarter is established and also the design team operates, represents for them a strength and a distinctive sign of uniqueness and knowledge about the product. Their products are very sustainable because they pay attention both to the environmental side and to the social one. 92% of textile products come from controlled companies that respect the RSL principles (restricted substances list). Salewa doesn't own directly production plants but they have created important partnerships with manufacturing companies located abroad which are certified and are controlled in terms of social and environmental standards. Suppliers in fact have to sign a specific code of conduct established by the company for the respect of stabilized standards. The company has developed recently an online platform with the aim to provide all certifications and conditions of products in order to make products more fair and to track the history and the manufacturing process of every article. (Salewa)

For part of their products they have decided to utilize local wool from Sud-Tirol because they consider the welfare of animals as a priority and so they want to control directly their conditions and the way wool is collected. Other products are

manufactured with used and recycled wool, it has been produced transforming used knitwear into yarn which is later utilize for the realization of new products. In this way they are adopting recycling techniques for the manufacturing of clothes and footwear; the origin of materials is also very important, as we said for the Sud-Tirol wool, they encourage and leverage continuously this aspect for example they received the Global Recycled Standard certification and the Cordato Recycled certification. Majority of articles are produced using the Iconic wool which is the recycled one and the most appreciated in terms of quality and performance by clients. In 2020 64% of styles and 87% of backpacks of Salewa's collections were carried over from previous collections. The company is in favor of sustainability and circularity from the design phase, products in fact are made for being repaired because the majority of them are modular and so people can change only some parts or some pieces without eliminating immediately the entire product.

Recycling systems are implemented also for prototypes, which are not eliminated after they have been utilized for a collection instead, they are created for being modified and utilized again for the design of following collections eliminating only non recyclable parts and minimizing, in this way, wastes.

Another tool promoted by Salewa for the increase of circular models is the creation of a resale platform and the realization of specific spaces located in almost every shop, where people can sell or buy such secondhand items at lower prices or, in the case they sell something they can obtain a credit to be used for the purchase of new clothes or footwear.

Upcycling is considered the trend of the future for Salewa, they produce using wastes from other products: for example Sarner Wool finger gloves are realized using yarns from the production of the popular Salewa Wool jacket, which is one of the most sold articles of the brand. The realization of such products is made by a company from Tuscany, even if the management of procedures and of the value chain is held directly by Salewa brand. Other collaborations were created also with universities and specific consultancy companies in order to exploit skills of possible new employees and strategies for capturing new clients. Salewa developed upcycling techniques also for walls plenty of pictures posted up in shops that are changed every year; the company decided to donate these used items to the nonprofit organization "La Venenta" for the production of tote bags.



Figura 28: Salewa gloves and jacket made with upcycling models

#### 4.4. REDO UPCYCLING

Redo is a new brand founded in 2014 in Trento and part of the ALPI cooperative which was created in 1991 and has today an income of about 3 million and more or less 120 employees. The name Redo is the English translation of the noun "Rifare", in fact everything comes from already existing fibers and materials. Another peculiar aspect of the articles is that they are unique and certified with two labels that define the code and the provenience of such products. (Redo upcycling)

REDO has a philosophy based on three main pillars: recycled materials for manufacturing, sustainability as core value for the entire production process and customization in the sense each product is different and unique. The sustainable side is supported also in the social side because Alpi cooperative has the purpose to integrate fragile people within working places and increase their position in the society. From the environmental side they have avoided the realization of 30.607 products and they have been able to recycle 38.318 m<sup>2</sup> of unutilized materials. (Redo upcycling)

All products are made using wastes, secondhand materials and parts of old footwear or advertising banners completely realized in the Trentino region. These items are in

the majority of cases from local firms, associations and people who consider circularity as an important tool for the future.

We can surely say the process starts with the collection of everything they can from the territory and the collection of wastes. For the design phase they combine technical skills with personal backgrounds of people and the use of innovative technologies. They consider themselves as industrial artisans because they produce handmade products with the usage of innovative machines and new technologies for example for prototyping. All models are projected by a multitask team composed of sales experts who know market trends and production experts who have specific technical skills and marketing experts who know precisely the right promotion channel according to product's characteristics. Another specificity is that all plastic parts are created in Trentino and are originated from sustainable suppliers who use only recycled plastics.

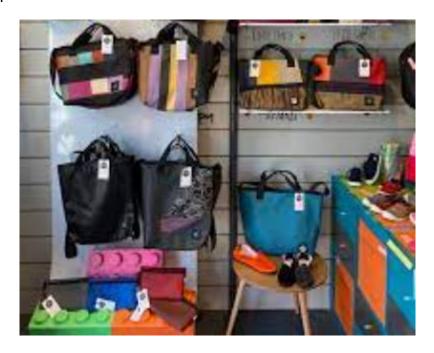


Figure 29: a wall of products in a Redo shop

After the first years Redo has achieved a negative result in the balance sheet, after they gained a break-even position and finally in the last years they obtained positive incomes. They organize production dividing it according to different product lines and promoting each one trough some stores and many popup temporary shops but also thanks to the participation to important cultural events in order to make people more conscious about sustainability and circularity.

# 4.5. MAGLOW CASE STUDY

Maglow is a new emergent company created at the beginning of 2020, when the pandemic started to spread all over the world. The brand is based in Treviso and strictly linked to local traditions and the strong know-how of small local family-owned firms. Founders consider its company as a micro brand that create only what will be sold focusing on limited edition in order to promote the uniqueness and the originality of the brand.

For Maglow products represent a real identity and people desire to buy their products because of the values they are based on and the core ideas of the brand. They are part of clients and of their identity reflecting personal, functional and aesthetic values. They leverage the durability of their items, in fact the entire supply chain is held in Italy, in order to control directly every phase and make possible the insert of specific labels that confirm such characteristics.

All materials and leathers are purchased by Italian suppliers who respect sustainable principles and circularity; the environmental impact is also reduced by the presence of very short supply chains and low logistic costs. The main material used for the iconic product which they manufacture in different sizes is the so-called "Sauvage" which is composed of natural leather not treated with chemical elements for the creation of the Flambé bag which is decorated also with white finishes.



Figure 16: Flambé with white finishes

The color white is very symbolic for the company because it represents a source of inspiration and the cause of the birth of the brand. In fact, founders have been inspired by the total white front page which was published by Vogue at the beginning of the pandemic as a symbol of the uncertainty and of all the possible changes the pandemic could bring.

#### 4.6.FREITAG CASE

The Swiss company Freitag has been created in 1993 by two brothers who were at the time students of the university of Zurich. The idea behind the creation of their bags was inspired by the fact many days in Zurich rained and they had to go to university by bicycle so they needed something to protect books from bad weather conditions. One day they collected a truck tarpaulins and started projecting a bag handmade for themselves that was after sold also to their close friends at university. Today we can say Freitag bags are considered an iconic product in terms of its deep values and its impacts. The main characteristic of their bags is that all details of such products come from wastes and already existing products as: truck tarpaulins, seat belts, bicycle tubes and airbags. Because of the symbolic value of items and the ideas they represent, Freitag's products have been exposed at Museum of Modern Art in New York.

The motto of the company is: "A Freitag is forever" because bags can be repaired in case of damage and also thanks to the platform created by the firm called shopping without any payment in which users can exchange for free their Freitag's models in order to increase the durability of products and satisfy people's desires of owning continuously new models.

The company nowadays has 200 employees with 28 flagship stores and about 400 retailers that sell Freitag's articles all over the world. They manufacture every year 300.000 products and recycle about 300 tons of tarpaulins that otherwise would have been to landfill. The shop in Zurich is considered the symbol of the company with a collection of about 1800 pieces shown there and an iconic route created for clients who visit the site and want to know more about processes, mechanisms and values of the company. Both the shop and the headquarter share an high level toward sustainability because they are built using a tower of stocked containers and a minimal usage of energy.

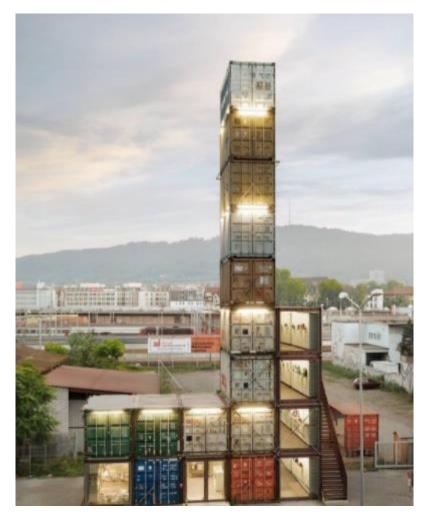


Figure 31: Freitag's tower in Zurich

They are implementing an up cycling system as a solution to overproduction and also sustainable trends that increase the levels of green within the company; for example they pay attention to sustainable mobility giving them free rental of bicycles within their shops in order to encourage sensitivity toward green themes.

In 2014 Freitag created a new and innovative fiber called F-abric which is obtained from vegetal and sustainable fibers produced close to Zurich and completely biodegradable so the sustainability emerges from the very beginning of the process. Other parts of clothes, for example bottoms, are modular because they can be moved from one piece to another in order to exploit them and use also when you throw away old clothes.



Figure 32: Freitag's model created using F-abric

The production process started with the truck spotting when specialized employees look for new interesting truck tarpaulins and signal them in the online systems starting the collection of materials phase. This research process is one of the most complicated phases because workers have to manage a large chain and a delicate process. After this first phase, tarpaulins are washed using rain water collected in the roof of the headquarter thanks to a specific collection system. Thanks to the high attention toward details they base their advertising campaign on fair descriptions and not on marketing strategies because people are purchasing a new lifestyle based on circularity and sustainability.

# 4.7. BGBL CASE STUDY

BGBL is the abbreviation of sum of all consonants present in the words bag and ball, in fact products of the company are composed with old basketball. The brand has been created at the end of 2018 and located in Treviso with a subsidiary in Milan and founded by the young woman Elisabetta Viola who is part of the Alfredo Viola

srl group. The firm increased its popularity thanks to the presence at Mipal 115 that took place in Milan in February 2019; products have been selected as the coolest discovery of such edition mixing a sportive culture and a sustainable interest. They are promoting a new concept of luxury. According to this one they consider the term as the possibility to choose something sustainable: the opportunity to choose is a stable point and an indication for what BGBL considers as luxury.

The purpose of the company is to give a second life to what would be otherwise throw away, in fact they realize items from old basketball donated by associations mainly based in the Veneto region. They consider their products as models considered a sort of base from which designers create infinitive variables that change depending on the basketball utilized. In parallel with old balls BGBL uses also leather from sustainable suppliers who operate only in Italy and particularly in the Riviera del Brenta and in Tuscany.

For BGBL sport has a deep value and they combine the typical sporty soul with the interest toward fashion and future trends leveraging continuously the made in Italy. The closeness to basket is strictly linked to the town where founders come from, in fact Treviso is the home base of important basket team as Montebelluna basket, Benetton Basket, Oderzo Basket.

Sourcing is a relevant part of the entire process because the brand has started also collaborations with associations in which it pays one new ball every two old ones they donate to BGBL. In this way the company is able to acquire new materials and associations are able to obtain new objects eliminating at the same time disposal costs. The brand purchases also old uniforms from sport teams for the creation of internal linings. This first part but also following ones are characterized by in sourcing in order to control the quality and to monitor final results of items; for example also shootings for following campaigns are held near the headquarter with a specific area dedicated to such operations.

They consider quality much more important than quantity and for this reason they produce only three typologies of bags: B-One, B-Three and B-Five which differentiate each other for dimension, usage and design. All products, but in particular B-Five, are considered a genderless item because you mix a feminine style with soft lines and a masculine style characterized by victory, determination and interest toward sport.

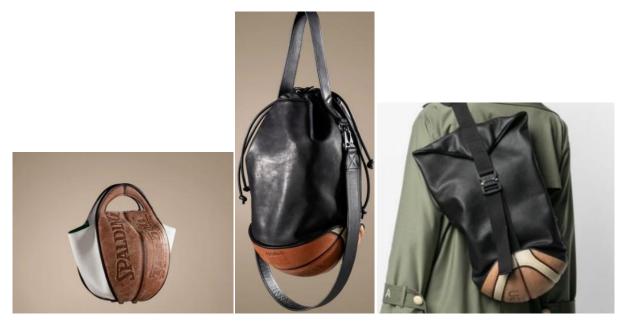


Figure 33: B-ONE, B-THREE AND B-FIVE models

From pictures we can see that each product becomes unique because they are realized with different basketball; and each bag tells also a different and original history depending on the origin of balls and of uniforms used for internal parts. They identify specific victories, looses, matches or events but also, for uniforms, they were worn by important players.

Differently from previous cases, they promote strong marketing campaigns both online and offline: for the first channel they pay lots of attention to e-commerce and in particular during the pandemic, when they also increased their social responsibility donating part of their income to the National healthcare system. Considering the offline channel, the brand opens every year a temporary shop in the centre of Milan during the Fashion Week in order to promote and to make more visible their unique, original and sustainable products.

# 4.8. REGENESI CASE STUDY

The company Regenesi was founded in Bologna in 2008 by Maria Silvia Piazzi; the idea came from the visit of founders in Naples during the period of wastes emergency. It started recycling and up cycling techniques in a period when in Italy such trends were not so popular, while today they are also consultants for other new emergent brands. The production is completely created from industrial wastes and recycled materials of every kind, the process is very innovative because

Regenesi is able to guarantee the same quality as the one promoted with the use of virgin raw materials.

This production process permits a 40% smaller print of carbon emission than the amount required from production starting from new materials. They produce only in Italy tightening the supply chain and working for projects with collaborations with suppliers and partnerships with important and consolidated companies as Dainese and Lamborghini which donated its logged wastes. All products are realized starting from the analysis of available second hand products; the design phase and the creation of prototypes is developed by local artisans leveraging handmade and craftsmanship. The closeness with the Motor valley has been exploited during the years and has also influenced the creation of their reputation thanks to local client's preferences; for example they purchased at low price old uniforms of MotoGP pilots and utilized them for their collections. (Regenesi)

The uniqueness of bags and clothes has been appreciated globally and in fact collections have been exposed at MoMa in New York, Centre Pompidou in Paris and also during the Expo in Shanghai. The cause of this positive reputation that they have comes from the core statement they want to transmit: they transform reject into desire leveraging old products and increasing the value.

In 2016 Regenesi launched the File Bag which has been created from wastes of regenerated leather and completely modular, in the sense people can change parts of their products and customize them as they prefer. It also obtained the certification Remade in Italy that indentifies the origin of products and their level of sustainability. All fibers are completely natural composed of chestnut flour for coloring, water and salt and finally latex from bamboo for the final realization.



Figure 34: examples of File Bag of Regenesi brand

This model has three sizes: small, medium and large and each one can be transformed changing cover and shoulder bags in order to make bags adaptable to each occasion. Special creations of File Bags have been created also mixing regenerated denim, lycra and plastic.

Another special collection is the Re-Flag one created thanks to the partnership with the designer Michela Gattermayer; these models have an essential look and are manufactured using plastic bottles. Other projects created in order to encourage people in terms of sustainability are for example "Rigenera i tuoi jeans" in which they started from old jeans donated by people and create a new bag that the same client could buy for a lower price.

# 4.9.LE FLEURS STUDIO

The original name of the firm created in 2017 was Le Fleurs and identified the brand launched by the Spanish designer Maria Bernad. All products were projected and realized by herself using secondhand products and materials, after they were promoted through social networks with detailed description about techniques and materials implemented in order to make the entire process as fair as possible.

The pandemic has increased her free time and for this reason she started thinking about all young designers who during the years contacted her for an advice or for the promotion of their clothes. For all these reasons, she developed in September 2020 a completely new platform called "Le fleurs Studio" in which she collects all products designed by independent unknown designers and she sells them within the platform in order to make such artists popular and their products visible. The platform is a retail one and it is also considered a community of people and artists who share a common vision and common ideas about the future. Thanks to digital tools people can remain in contact and learn from each other, developing more innovative techniques and promoting new ways of doing business in the fashion industry: in the past we assisted to the exponential growth of e-commerce for selling new products while today Le Fleurs Studio could be a sort of forerunner for sites specialized in the sale of up cycled and recycled products.



Figure 35: an example of a product sold in the platform

As we can see in the picture, each product is very well described in the platform so clients can know the story, the origin and the process of realization of each article. Every phase is directly checked by the founder; she chooses designers who can promote their products within the tool (today there are 15 designers part of the group) and she also manages the aesthetic part of the site and the design. As we can see there is also the specification of the date of creation because considering circular models and sustainability, also warehouses are a cost and they pollute the

environment; for this reason it is important to guarantee at maximum levels a just in time production.

Today the platform has about 50.000 followers on the Instagram page and this number is continuously increasing thanks to the participation to events and the publication of a specific magazine in which the founder describes important initiatives and specific phases of the process implemented by Le Fleurs Studio. The original brand has also an offline store located in Madrid where the main pieces of collections are exposed and sold, in the future the founder of the platform will also open the door to products designed by other artists of the group who today sell their items only within the online channel.

Le Fleurs Studio is divided into a vintage collection created from luxury articles already existed and no more in the main market. The other part is composed of collections by season created with wastes and recycled materials in fact designer don't produce anything but they can only re utilize old items or raw materials for the manufacturing of something new.

### 4.10. CASAGIN

CasaGin is a completely Made in Italy brand created in 2017 with the aim to be both ethical and sustainable. The Italian name has an important meaning in fact CASA is the Italian translation of the word home and it means every person enter the company has to feel comfortable and resemble of being at their home; the second part of the name is GIN and it represents the mission of the brand which is to become genuine, innovative and natural. Daniela Prandin is the founder and with her team she received in 2019 an important prize by MIT in Boston as one of the most innovative startups all over the world.

They are considered so innovative because of materials they utilize and the way they manage the company; products are manufactured mainly using:

- Beech fiber: this material is natural and very durable, much more than cotton one. It has a low environmental impact because it doesn't require artificial irrigation systems and the use of strong and negative pesticides.
- Tencel modal fiber: this one is very important for sustainable production because you consume twenty times less water than normal fibers and you can achieve the halving of CO2 emissions.

- Tencel Lyocell: this fiber is obtained from eucalyptus wood which is produced without using water and pesticides so in a more convenient and natural way. It is also sustainable for the soil because using the same space you are able to create 10 t-shirts made of eucalyptus fibers and only 1 t-shirt if we utilize normal cotton fibers.
- Cotton: it is an organic cotton completely produced respecting circular and sustainable processes; all cotton utilized by the brand has achieved the Global Organic Textile Standard which identify the fact cotton comes from circular productions.
- Econyl: this material is created from fish nets collected in the oceans as wastes; thanks to this development the brand has contributed to the reduction in the use of 70.000 barrels of fuels and eliminated 57.100 tons of CO2 emissions. Recycled nylon is able to reduced by 80% the impact over global warming compared to nylon produced from petrol. Within the company the material has been utilized in particular for the creation of the beach wear collection.
- PET: recycled pet has been developed starting from plastic bottles collected by the company and brought to a recycling center were they have disassembled it into elementary parts and transformed into flakes implemented for the production of new items with the same levels of durability and quality.



Figure 36: example of products realized with econyl and recycled pet

The production process, starting from materials described above, is located completely in Italy and with partnerships with small, family-owned companies;

paying lots of attention to fairness because for example in the webpage there is a section dedicated to the description of all suppliers and the methods they adopt for production. This aspect is very important and has become crucial during the pandemic when the company has been able to survive thanks to its local supply chain and e-commerce. CasaGin achieved important results in terms of reputation because of the sustainable usage of the soil and the environment; every year they are able to plant 10.000 more trees and the amount they utilize for the production of fibers. Another example is given by the fact, the firm has decided to donate 10% of its total income to the NGO WWF for safeguarding polar bears and koala. Sustainability for them, in fact, means reduce the amount of pollution levels, reduce the consumption of resources and produce higher quality products able to transmit a sense of welfare.

Made in Italy is not only important for what concerns sustainability but it is also a meaning of quality and a way to leverage the beauty economy all over the world.

### 4.11. FEELING FELT

FeelingFelt is a brand created in 2018 after an holiday spent in Puglia where founders discovered the problem of plastic abandonment both in the sea and near nice caves. They utilize for manufacturing only recycled materials, recoveries from inventories and wastes. One of the main purposes of FeelingFelt is to make durable and with high quality products; this duration is increased by the opportunity given to clients of repairing for free during the first year after the purchase all products.

For the company every item is thought for increasing the welfare of both the planet and people; they consider as very relevant feedbacks of users who are part of an online community and social networks pages. For this reason each collection is characterized by different colors with the name of an endangered species because for the company the respect of animals and of the nature are at the first place; for example they produce only vegan products with no impacts over nature.

The supply chain is very short composed of all suppliers located for the 90% in Italy and for 100% in Europe, posing maximum attention to the fact suppliers own qualified certifications in terms of sustainability and respect of nature. This

importance is emphasized by the fact majority of furniture presents in laboratories are secondhand objects bought from other companies or vintage stores.

FeelingFelt uses some peculiar materials for their production:

- Felt from recycled bottles and in posses of the certification GRS
- Cark which can be natural or with natural coloring produced completely in Italy and with REACH certification.
- Vegan leather which is from vegetal items and free from solvents with three certifications that declare the origin of such products.
- Tape that comes from regenerated fibers used for bags' production and realized using cotton and fibers from wastes and recycled old clothes.
- Pinatex which is a fiber created from the idea of abundance of natural resources and that provides social and economic welfare also for local farming communities. In this sense the use of this material supports the positive attitude toward sustainability and social welfare promoted by the company. The use of this material reduces the use of energy for example comparing the charge of 33 million smart phones.



Figure 37: Pinatex material

- Recyled paper which is not utilized directly for the production but for packaging because all materials dedicated to this phase are biodegradable and certified FSC.

The first collection was realized only with felt, while today the company produces also items with other products and in particular with Pinatex and organic ones.

# 4.12 GENERAL FEATURES OF THESE NEW MODELS

In the previous paragraphs we have analyzed many brands: some of them are real startups while others are more consolidated and known brands. All these examples have been chosen because of their attention toward sustainability in all different aspects and for the positive reaction they have created among clients.

# 4.12.1. A NEW CONCEPT OF BEAUTY

Beauty is a very important and symbolic concept that has been developed in the history and has assumed different meanings during the time, differentiating the importance of aesthetics and the one given by people to such elements. In Italy, 17.2% of the entire GDP has been generated by the Economy of Beauty in 2019 with a revenue of about 682 billion. The so-called beauty economy is based on the idea of transferring cultural heritage and the story of our country to other cultures and new generations, but also promoting new principles inspired by such traditions. All the cases analyzed in this thesis are examples of the development of beauty economy principles in new competitive scenarios. These companies in fact represent the values of made in Italy mixed with innovation and attention for current themes. They have, for example, the production located completely in Italy and they leverage the experience of local artisans able to produce using made in Italy principles and an historical know-how. The production in Italy is an occasion for such companies to leverage the value of their products and to justify the premium price they apply for the quality they represent and the heritage they leverage at international level. They are able to attract clients also from foreign countries because of the traditions related to our country and the fact they can transmit both an extrinsic beauty linked to the production held in Italy and an intrinsic beauty because clothes represent sustainable and green values. We can say today beauty is more a synonym of ethic than one of aesthetic because the wellbeing of people and clients and the respect for the environment and for all people independent from their gender or origin are much more important than the external aspects of what they produce. (Wetheitalians)

The majority of companies adopt such principles among their core values and they base their value chains on productions located in their home country and with the expertise of professional figures with high and specialized skills; able to generate beauty from very simple fibers because they are able to transmit inner values within each product. The choice to produce with the support of local artisans is also a strategic point because, in this way, firms can increase their reputation and clients recognize the style represented historically by Made in Italy within their items. It is a question of heritage and identity of a real brand, as the one described before, in fact for example in the 1950s the consolidation of the brand has been realized leveraging craftsmanship, quality and skills.

Today the concept of beauty related to products sold by fashion companies is changing its characteristics: in the recent past people purchased mainly clothes from multinational companies not because of the quality or because of social values but because of the brand they represent and in order to match common trends and identify themselves with the mass market. Fashion experts said purchasing decisions of people are symbols of their identification and the values they want to transmit but the trend reveals the contrary, in fact, in the majority of cases clients buy what is worn by their idols or what is promoted by companies in their seasonal marketing campaigns. (Fashion history)In these last years and in particular with the pandemic things started to change, customers changed their mindset and started basing their purchasing decisions on specific values related to social and environmental aspects that in the past where almost completely ignored. The trend has been emphasized by worrying situations that are happening all over the world and that make the production and the founding of raw materials and energy as very critical; today with the war between Russia and Ukraine the situation is becoming more dangerous and difficulties for the provisions are becoming more and more dramatic. These are the main causes, firms are almost obliged to intervene and change their model for becoming sustainable and making their production systems possible.

The present and the future of the world are strictly linked to the capability of companies to reduce their emissions and the ability to produce in a sustainable way for the environment and in a more conscious way over their workers; these are very

important priorities for fashion companies because the sector is one of the most polluting over the globe. Thanks to marketing campaigns and the ability to create partnerships with startups and NGO' they have been able to transmit the same priorities to their clients and justify for example the increase in price of their products because of the utilize of innovative materials or the implementation of recycling strategies; others have adopted specific campaigns of withdraw of old clothes in exchange of discounts, in this way clients had the opportunity to reflect about the importance that recycling and upcycling are assuming because also firms are studying specific campaigns focused on such themes. Fashion corporations have focused their attention of business model innovation in favor of sustainable aspects in every phase of their value chains and they changing completely their models for the survival in the complicated new competitive arena.

Changes in people's mind can be seen also regarding another important aspect about the canons of female beauty that have changed during the last century and have obliged companies to adapt to such changes. In the 1990s we can remember the example of Benetton's campaigns that wanted to represent social and gender problems more than their clothes in order to make people reflect about the current situation and leverage, in this way, the reputation of the company.



Figure 38: Benetton's campaign in favor of equality

We have assisted also to the case of Victoria Secret that promoted for several years the idea of perfection of female bodies with the so-called angels that have symbolized the concept of perfection among women from all over the world. Today the company is considered on the opposite side as an example of stereotyped beauty and accused for the promotion of female beauty as an object of desire; for these reasons it has decided to abolish the presence of angels in favor of normal people who represent specific sub-groups emancipated in the past and considered fortunately part of the community today as transgender people or black people as a form of female empowerment.

All these ideas that are becoming crucial for the success of companies for the present and the future are also supported by experts who dedicated their carriers and their studies to those themes. An example can be found by the new important concept introduced by William McDonough and Michael Braungart who created a new "R"; added to reuse, recycle and reduce; as acronym of re-thinking because for them, all new models and new concepts that have become dominant ones are based on the reorganization of the society and new consciousness promoted by the media and by institutions that are describing in a very realistic way the environmental and social situation of our planet. (Reader) Globalization is surely part of this new consciousness because in the past there was less information about conditions and situations that happened in foreign countries and in the ones very far from the home country; today with the internet and the increase in travels people are able to know different situations that happen in the world in real time and can react in different ways for the promotion of changes. For example working conditions of people in China or in India are today a relevant battle for western people who consider such situations as unacceptable and promote actions as boycotts or negative advertising over companies that do not respect human rights and the environment of developing countries. For these reasons many companies started creating in their websites or in the labels of their clothes explicit descriptions about the origin of materials utilized and the way the entire production process is developed giving references to local companies and suppliers in a way that final clients are able to identify the process and the way they operate.

If we see again all the pictures showed in this chapter, we can see the majority of products created by these companies are characterized by a very low focus over traditional values of aesthetic that, as described above, have been a symbol of

Italian production all over the world in the past. In the previous years, in fact, the priority of firms was to create something nice and able to be appreciated by national and international clients; inspiring themselves from traditional concepts and habits from the renaissance period. Today customers are more interested into the level of uniqueness and originality of clothes and the value of items is much more higher for products not be able to be reproduced on large scales and that clients are not able to find in other parts of the world or in unlimited quantities. In the case of Freitag for example each bag is different because it is produced using tarpaulins from different tracks and designers are not able to find exactly two pieces of material completely identical and with the same level of usury. The same happens for BGBL bags, as described before, because in this case basketballs can also be identical, even if in limited quantities, but the story they tell are different because each ball has been used for different matches, of different importance and also they are part of different teams. In some cases the value of bags increases exponentially because for example balls have the autographs of important national and international players.

All these fashion items created are very original, plenty of different colors and they represent a new concept of beauty; in all these examples the deep and implicit beauty is much more relevant than the external one created from colors, shapes and fantasies. The aspect related to deep beauty is considered today by young generations a real decisive for their purchasing choices and for this reason companies are obliged to face with these new elements and to find a solution because Millennials and GenZ will be the predominant clients for the future.

# 4.12.2 NEW TRAJECTORIES FOR COMPANIES' SUPPLY CHAINS

Supply chains are the core phase of value propositions of every company concentrated both on the production or on the trade of goods. This phase is in fact responsible of the control over costs, possibility of sales and marketing campaigns created by companies all over the world. In the last 30 years fashion companies have mainly adopted global supply chains able to produce on a large scale, exploiting low prices of raw materials and low wages paid to workers in developing countries. Today the geo-political situation has changed and also the needs and the key drivers for the competitiveness of companies; these reasons have caused the change of business models of incumbents companies and the birth of many startups

that share these ideas and operate in a more local way. The pandemic has accelerated a trend that was already present in companies' mind because, during lockdowns spread all over the world vessels were not able to leave ports, increasing transportation costs of six times and today with the increase of fuel costs the price of a container transported by sea has achieved 15.000 or 20.000 dollars becoming impossible to sustain in the long term. (Reuteurs) Delivery time has become another fundamental problem because companies are not able to deliver products in time, increasing customers' dissatisfaction and making them change their purchase habits in favor of more local and flexible companies able to respect deadlines; companies that adopt global supply chains have assisted to an increase from 25 to 60 days for the delivery of their clothes in recent years making the model unable to remain competitive. (Voguebusiness)

The shortening of supply chains is linked to another phenomenon that has been happening among companies: the creation of lean chains able to reduce wastes at maximum levels because the method requires a production process that starts when there is a real demand of goods ready to be sold. Lean production means also the creation of deeper relations with clients and suppliers because companies have to acquire precise information about customer's preferences and transmit them to producers, coordinating a network composed of different actors. For the success of a lean supply chain in fashion industry nearness is another key aspect, the fact that suppliers and companies are close to each other is very relevant for producing in a lean way remaining competitive in the market. In fact, fast fashion companies or the ones that decided to operate in the traditional way program their production phases in advance and are able to offer to the market high amount of clothes in very few time and to change the inventory and the models very fast because everything is already ready to be sold before the market need them. The unique solution for companies for adopting a lean supply chain and for being competitive is to reduce the geographic distance of different parts of the supply chain in order to increase face to face communication and to reduce delivery time of finished products. The nearness offers also the possibility to know better the market and the needs of local clients, for example, in terms of sustainability or aspects of products that change according to habits and cultures. Finally, lean supply chains are adapt to small productions and so to companies that operate in a small scale or produce limited editions because firms start the creation when clients demand the product or immediately before, when trends are defined and for example wastes are founded.

The fact companies utilize as raw material wastes is another important aspect because they do not have infinite amounts of materials that can be used but they have to make the best from what they are able to collect as the case of Freitag for truck tarpaulins or the case of Vitelli that produce its clothes using the "Doomboh" material coming from only already existing items.

Majority of cases we have analyzed in this work are small companies created in the past years from the idea of brilliant and original entrepreneurs who consider sociality and environment as core aspects for the future of the sector. These firms have been created in strategic places: some based in important cities as Milan or Rome where there is a deeper sense of responsibility toward such themes because of influences from foreign countries where those aspects are already part of their culture and habits. Other ones are located near places where traditional districts are located so firms can leverage the knowhow of local artisans and small familiar enterprises helping local economies and producing high quality and premium products able to obtain high consensus both at national or international levels. We have also analyzed some international companies as Salewa and Freitag that operate on a global scale with subsidiaries all over the world; in these cases they have modified their supply chains in order to remain both competitive on an economic and social side. They have in fact decided to produce near final clients and final markets creating production plants all over the world: Salewa for example produces in Europe for the European market, in Asia for the Asian one and in American for American consumers; following this strategy they reduce at minimum levels transportation and logistics costs and at the same time they are able to match different customers needs according to their habits, the climate and the culture of the country where they live. The strategy followed by Freitag is a little bit different because they create prototypes in their headquarter in Noerd (Switzerland) and after they sent them to specialized firms located in particular in Europe where bags are finished and customized for being sold all over the world, matching all preferences of very different clients.

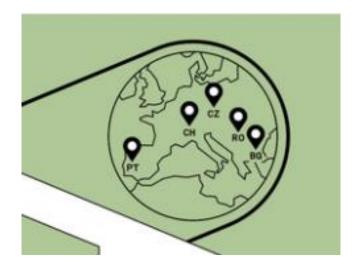


Figure 39: examples of firms dedicated to finishing phases located in Europe

We can say the statement "the world is flat" promoted and supported by Thomas Friedman is no more the summary of fashion entrepreneurs but it is something considered as overcome and evolved into something new and more local. They do not believe there is a unique world where many actors can participate and be integrated within the unique global supply chain. In the past globalization and the realization of global chains was the primary objective of every company from the biggest one to small startups; today ideas have changed and the idea of global has become much more local or regional.

New start uppers, as the ones we have seen in the cases analyzed, consider themselves as local citizens and no more global ones, they want to enhance the possibilities, the skills and the opportunities of their territory and they want to transmit their values and cultures; they are surely more conscious about their land and they want to leverage such aspects. In Italy we are assisting to a renaissance of the importance of traditional districts where skilled artisans operate in a traditional way and with traditional methods.

Being local citizens means also keep lots of attention toward transparency, human rights, social and environmental aspects. The decision to create new companies completely managed and operating in their home countries reflects this idea of operating in a way that can make happy both clients and the environment and also as a source of satisfaction of the models created by themselves. Their background studies have also influenced their decisions and their management style characterized by supportive and collaborative ways of doing business, where workers are part of the family and participate to the creation of the success of these

new innovative models. Transparency is considered today as convenience was in the past; in these days what can be seen explicitly by customers, can be traced and can respect both people and environment is appreciated and it is a justification for clients to pay a premium price.

These are all symptoms that the world is changing and also people and they way of doing business; all young entrepreneurs we have seen are symbols of new ways of doing success and also guidelines for future generations who want to enter a new business following these new and successful lines.

# 4.12.3. THE CONCEPT OF "LESS IS MORE"

"Less is more" is known today as a philosophic concept but it is also utilized in many sectors included the fashion one. On one side the concept refers to all new tendencies that appreciate much more what is minimal and simple but original: people give less importance toward accessories or decorations and much more to quality, style and inner ideas behind the materialistic side of clothes. The other aspect of the concept "less is more" is referred to the necessity and the trend toward the reduction of the amount of items produced in order to reduce pollution and energy consumed. In this period it is very important for companies to consume less energy because of higher tariffs and, as consequence, higher costs for production. With recycling, companies are able to face such price increases because they haven't to purchase high amount of raw materials and also because they are able to make money from their wastes, reducing also their disposal costs. As we have already said, 70% of companies consider sustainability and recycling as fundamental for their survival in the competitive arena of the future and all these increases in prices of both raw materials and energy are a confirmation to the fact this practice is the key aspect for all firms of the future.

Less is more is an expression used also referring to the necessity of reducing the number of collections launched every year by fashion companies. Giorgio Armani, for example, focused a long on the fact that there is a misalignment between climatic seasons and the ones thought by fashion companies plumping the phenomenon of overproduction. In fact, people start buying on February what they will wear in July, without any criteria and continuously arriving in the correct season to have a lot of clothes and sometimes also items they do not like or they do not represent the real trend according to the mass market preferences.

Another issue that support the fact that "less is more" is a trendy concept and one of the most relevant for the future is the need of a reduction in the number of collections presented every year by companies as Armani, Donatella Versace and other important international fashion brands owners. Companies today present on average three collection per season at a distance of two months from each other; these rhythms make a product purchased on August as already old on October. It creates also a psychological biases in customers' mind because they want to buy always the newest product even if they have not utilized the one purchased before, incrementing exponentially the number of products made and also thrown every season to landfills.

Changes in people's preferences affected also the way collections are organized and held because in the past there was high attention toward sumptuous shows located in the most exclusive locations in the world. Today, on the contrary, people appreciate much more what is minimal but with high significance and shows that are able to concentrate on the product itself and leverage the inner characteristics for example taking place shows in meaningful places.

The less is more concept is not emphasized only by traditional brands but also by new startups and small companies that have made strategic decisions in favor of the reduction of production respecting the preferences of customers in favor of the idea of change the look to what they own. Regenesi, the company described before, in order to respect these principles introduced the aspect of modularity for the File Bag created in 2016 in order to open to the possibility of changing only some parts of the product maintaining the majority of them. With this opportunity the firm is able to reduce its production from the entire bag to small parts that can be applied to all models, incentivizing both the purchase of bags and of some parts. In the first case people are encouraged to buy this bag and not other ones because they have the possibility to make that item fashion for a long time and at low price because modular parts are surely more convenient than the purchase of a new bag. In this case the concept of "less is more" is interpreted by Regenesi as less production because fewer bags are made and more variability of models because changing only some parts we can obtain bags with new look and that appears to us as a new purchase.

Finally "less is more" idea is developed in a certain sense also by companies who utilize as materials plastic bottles because they cause a reduction of wastes spread in the sea and simultaneously an increase of models available in the fashion market and with original styles that represent the value proposition of modern clients.

# **CONCLUSIONS:**

The project of thesis developed has the objective to analyze changes that are occurring in the fashion industry and in particular trends as recycling, up-cycling and sustainable circular methods. The break of the pandemic has surely accelerated the development of all these innovative business models; in fact companies have been obliged to face suddenly radical changes in all steps of their value and supply chains. They become today conscious about the fact that being sustainable is today fundamental for being competitive and appreciated by clients, mainly by young generations.

The question thesis posed at the beginning about how recycling and up-cycling can change value chains has been analyzed from different points of view: starting from a theoretical explanation and ending with the description of how such methods have been applied to real and successful cases; as a confirm that all these processes and methods are assuming crucial importance for the future of the market and for the results of fashion companies both incumbents and insurgents.

In the analysis developed in this thesis we can see how the fashion industry has faced these needs and the results they have obtained. The use of organic raw materials, for example, has been crucial for the reduction of soil exploitation in poor countries where people were obliged to live in polluted and very dangerous environments for their health with dramatic consequences also for children. We have demonstrated that fashion companies and multinational ones had based their models on profits and exploitation of emergent economies in the past in order to reduce costs and increase their margins; but that today all these aspects have been modified preferring sustainable habits and processes. Sustainability for fashion firms means also short supply chains that can both reduce emissions for example the ones caused by transports, and also adapt collections to local clients in order to match better their preferences; adaptation is today the best strategy for increasing profits and clients' loyalty.

Circularity is the other important topic of the thesis that has been developed explaining how resale and recycling are part of this innovation. Researches and reports have confirmed the fact such initiatives are obtaining important results and constant growth in terms of profits and popularity with a turnover of 36 billion in 2021 for the resale segment. Resale is strictly linked to the final phase of the process

because it means used items are sold again in the secondhand market; while recycling involves the entire production process because we recycle both materials, fibers and final clothes or accessories. Fashion companies have projected a new radical model with recycling because they were obliged to change the way materials are transformed into new products adding the new phase of collection of raw materials and division of them into elementary parts that can be singularly used again. Researchers have demonstrated that the fact products and materials are recycled increases the reputation of companies and their ability to capture new clients segments as young generations.

Recycling, sustainability and up-cycling have created a new way of doing business focused on quality, durability and low impacts on the environment and on human life in emergent economies promoted both by the birth of many small startups and by the creation of partnerships between startups and incumbents or by the definition of specific functions of firms dedicated to upcycling and recycling as the case of Salewa.

In conclusion we can say the entire sector is changing and is becoming much more addicted to sustainable topics leveraging the importance of ESG principles and CSR function; even more than profits they are able to generate and quantity they are able to produce. All these aspects are supported also by institutions that are promoting the objective of being neutral for what concerns emissions and pollution by 2050 in almost all economic sectors. The road for the achievement of a total sustainable sector is still far but today we are nevertheless achieving important results with more than 70% of fashion companies that are promoting projects linked to circularity and sustainability and an estimation of 700 million turnover generated from resale, recycling and upcycling by 2030 according to Ellen McArthur Foundation. These data are encouraging, not only companies, but also customers to change their habits and to give importance to sustainable aspects for the future of the planet and for the well being of human life and finally we can say all cases analyzed are a demonstration of the success of such trends.

### **BIBLIOGRAPHY:**

MDPI; Fogarassy and Finger; 2020: "Theoretical and practical approaches of circular economy for business models and technological solutions". Available on: <a href="https://www.mdpi.com/2079-9276/9/6/76/htm">https://www.mdpi.com/2079-9276/9/6/76/htm</a>

Springer links; Murray Skene and Haynes; May 2015: "The circular economy: an interdisciplinary exploration of the concept and application in a global context".

Available on: <a href="https://link.springer.com/article/10.1007/s10551-015-2693-2?email.event.1.SEM.ArticleAuthorContributingOnlineFirst&error=cookies not supported&error=cookies not supported&code=9541ad9a-5985-4a26-ab61-8a7e1bd1ad82&code=ed544cc1-0906-44c4-8a83-f1e32ba27ec2"

Science Direct; DePascale, Arbolino, Depczynska, Limosani, Ioppolo; 2020: "A systematic review for measuring circular economy: the 61 indicators". Available on: https://www.sciencedirect.com/science/article/abs/pii/S0959652620349866

Springer links; Chen, Memon, Wang, Marriam, Tebyetekerwa; 2021: "Circular economy and sustainability of the clothing and textile industry". Available on: <a href="https://link.springer.com/article/10.1007/s42824-021-00026-2">https://link.springer.com/article/10.1007/s42824-021-00026-2</a>

EllenMcArthur Foundation; "What is a circular economy". Available on: What is a circular economy? | Ellen MacArthur Foundation.

Science Direct; Akhimien, Latif, Shan Hou; 2020; "Application of circular economy principles in buildings: a systematic review". Available on: <a href="https://www.sciencedirect.com/science/article/pii/S2352710220336731?casa\_toke\_n=WZQX3uRssGMAAAAA:TtTkxtPzvkBoljVWCddnUBQ6W38FE7Ws\_WuXyEmimY4gRuyullVrK8mw7ea\_KGtlDrxHehG0wss\_newspace\_ne

Science Direct; Morseletto; 2019; "Targets for a circular economy". Available on: <a href="https://www.sciencedirect.com/science/article/pii/S0921344919304598">https://www.sciencedirect.com/science/article/pii/S0921344919304598</a>

Circle Economy; "The key elements of the circular economy". Available on: <a href="https://www.circle-economy.com/circular-economy/key-elements">https://www.circle-economy.com/circular-economy/key-elements</a>

Digicirc; "The evolution of circular economy". Available on: <a href="https://digicirc.eu/the-evolution-of-circular-economy/">https://digicirc.eu/the-evolution-of-circular-economy/</a>

Statista; "Digital markets, e-commerce, fashion". Available on: <a href="https://www.statista.com/outlook/dmo/ecommerce/fashion/worldwide#revenue">https://www.statista.com/outlook/dmo/ecommerce/fashion/worldwide#revenue</a>

Emf; 2017; "A new textiles economy: redesigning fashion future". Available on: <a href="https://emf.thirdlight.com/link/kccf8o3ldtmd-y7i1fx/@/preview/1?o">https://emf.thirdlight.com/link/kccf8o3ldtmd-y7i1fx/@/preview/1?o</a>

OrangeFiber official website. Available on: <a href="https://orangefiber.it/it/salvatore-ferragamo/">https://orangefiber.it/it/salvatore-ferragamo/</a>

ThredUp; 2021; "Resale Report 2021". Available on: 2021 Fashion Resale Market and Trend Report | thredUP

Business of Fashion; Rahul Malik; 2021; "The future of fashion resale report". Available on: <a href="https://www.businessoffashion.com/reports/retail/the-future-of-fashion-resale-report-bof-insights/">https://www.businessoffashion.com/reports/retail/the-future-of-fashion-resale-report-bof-insights/</a>

Emerald; Machado, Almeido, Bollick, Bragagnolo;2019; "Second-hand fashion market: consumer role in circular economy". Available on: <a href="https://www.emerald.com/insight/content/doi/10.1108/JFMM-07-2018-0099/full/pdf?title=second-hand-fashion-market-consumer-role-in-circular-economy">https://www.emerald.com/insight/content/doi/10.1108/JFMM-07-2018-0099/full/pdf?title=second-hand-fashion-market-consumer-role-in-circular-economy</a>

Vogue Business; Baraka; 2021; "Secondhand fashion: is it really good for Africa?". Available on: https://www.voguebusiness.com/sustainability/secondhand-fashion-is-it-really-good-for-africa

Bloomberg; 2021; "China's secondhand business is booming". Available on: https://www.bloomberg.com/opinion/articles/2021-09-21/china-s-secondhand-business-is-booming

Edition; Holland; 2020; "Can China look counterfeits and superstition in its burgeoning second-hand fashion market?". Available on: https://edition.cnn.com/style/article/china-second-hand-fashion-sept/index.html

Statista; Smith; 2022; "U.S. apparel and footwear resale markets- statistics and facts". Available on: <a href="https://www.statista.com/topics/5161/apparel-and-footwear-resale-in-the-us/#dossierKeyfigures">https://www.statista.com/topics/5161/apparel-and-footwear-resale-in-the-us/#dossierKeyfigures</a>

Mffashion; 2021; "The RealReal, Gucci è il luxury brand più comprato e venduto". Available on: <a href="https://www.mffashion.com/news/livestage/the-realreal-gucci-e-il-luxury-brand-piu-comprato-e-rivenduto-202108261122112155">https://www.mffashion.com/news/livestage/the-realreal-gucci-e-il-luxury-brand-piu-comprato-e-rivenduto-202108261122112155</a>

The RealReal; official website. Available on: <a href="https://www.therealreal.com/about">https://www.therealreal.com/about</a>

Kr-Asia; Jingli; 2019; "Plum, Chinese platform for secondhand luxury raises 20 million in series B+ round". Available on: <a href="https://kr-asia.com/plum-a-chinese-trading-platform-for-second-hand-luxury-goods-raises-usd-20-million-in-series-b-round">https://kr-asia.com/plum-a-chinese-trading-platform-for-second-hand-luxury-goods-raises-usd-20-million-in-series-b-round</a>

Sphera; editorial team; 2020; "What is environmental sustainability". Available on: <a href="https://sphera.com/glossary/what-is-environmental-sustainability/">https://sphera.com/glossary/what-is-environmental-sustainability/</a>

Peasoup; 2021; "ESG and sustainability- what's the difference?". Available on: https://peasoup.cloud/2021/06/14/esg-and-sustainability-whats-the-difference/

Oxford; 2022. Available on: https://www.oxfordlearnersdictionaries.com/definition/english/sustainability

Ec-Europe; "Corporate social responsibility and responsible business conduct". Available on: <a href="https://ec.europa.eu/growth/industry/sustainability/corporate-social-responsibility-responsible-business-conduct">https://ec.europa.eu/growth/industry/sustainability/corporate-social-responsibility-responsible-business-conduct</a> en

Tandfonline; Cohen; 2020; "Will Covid19 support the transition to a more sustainable fashion industry". Available on: <a href="https://www.tandfonline.com/doi/full/10.1080/15487733.2020.1829848?scroll=top">https://www.tandfonline.com/doi/full/10.1080/15487733.2020.1829848?scroll=top</a> &needAccess=true

Sustainablebrandplatform; Florania description. Available on: https://sustainable.ideebrandplatform.com/brand/128/Florania.html

Facebook, atelier Florania page. Available on: <a href="https://www.facebook.com/Atelierflorania/">https://www.facebook.com/Atelierflorania/</a>

Lampoonmagazine; Zwieglinska; 2021; "Vitelli- sustainability is not buzz-word anymore, we need to be honest". Available on: Vitelli – Sustainability is not buzz-word anymore, we need to be honest (lampoonmagazine.com)

Vitelli, official website presentation. Available on: <a href="http://www.vitelli.eu/shelf/">http://www.vitelli.eu/shelf/</a>

Waitfashion; Crippa; 2021; "Upcycling tutti i brand da conoscere". Available on: <a href="https://www.waitfashion.com/upcycling-tutti-i-brand-che-dovresti-assolutamente-conoscere/">https://www.waitfashion.com/upcycling-tutti-i-brand-che-dovresti-assolutamente-conoscere/</a>

Pittilmmagine; official website. Available on: <a href="https://uomo.pittimmagine.com/100/exhibitors/V/vitelli">https://uomo.pittimmagine.com/100/exhibitors/V/vitelli</a>

Mffashion; 2021; "La maglieria sperimentale second Vitelli". Available on: <a href="https://www.mffashion.com/news/livestage/la-maglieria-sperimentale-secondo-vitelli-20210924141207995">https://www.mffashion.com/news/livestage/la-maglieria-sperimentale-secondo-vitelli-20210924141207995</a>

I-D; Margiaria; 2019; "Vitelli il brand di maglieria che racconta l'identità in modo spontaneo e istintivo". Available on: <a href="https://i-d.vice.com/it/article/kzm4b9/vitelli-e-un-invito-a-raccontare-lidentita-italiana-in-modo-spontaneo-e-istintivo">https://i-d.vice.com/it/article/kzm4b9/vitelli-e-un-invito-a-raccontare-lidentita-italiana-in-modo-spontaneo-e-istintivo</a>

Salewa; official website. Available on: <a href="https://www.salewa.com/it-it/recycling-and-upcycling">https://www.salewa.com/it-it/recycling-and-upcycling</a>

Ispo; Becker; 2019; "Salewa: from mountain sheep to award-winning sportswear". Available on: https://www.ispo.com/en/trends/alpine-wool-salewa-leads-wool-new-age

Salewa;2020; official website; "Sustainability report 2020". Available on: Oberalp-Sustainability-Report Contribute-2020.pdf (salewa.com)

Redoupcyling; official website. Available on: https://redoupcycling.com/

Maglow; official website. Available on: https://maglow.it/pages/sustainability

Dw; 2010; "Freitag brothers make bags full of tricks". Available on: <a href="https://www.dw.com/en/freitag-brothers-make-bags-full-of-tricks/a-15460986#:~:text=The%20story%20of%20Freitag%20bags,up%20in%20the%20inclement%20weather">https://www.dw.com/en/freitag-brothers-make-bags-full-of-tricks/a-15460986#:~:text=The%20story%20of%20Freitag%20bags,up%20in%20the%20inclement%20weather</a>.

Lifegate; Budgen; 2017; "I fratelli Freitag. Dai teloni di camion al tessuto biodegradabile, pionieri dell'economia circolare dal 1993". Available on: <a href="https://www.lifegate.it/fratelli-freitag-intervista">https://www.lifegate.it/fratelli-freitag-intervista</a>

Freitag; official website. Available on: <a href="https://www.freitag.ch/it/history">https://www.freitag.ch/it/history</a>

Thegoodintown; 2020; "Circular economy the world of the circular economy". Available on: Circular economy, the world of the Freitag brothers - The Good in Town

BGBL; official website. Available on: <a href="https://www.bgbl.it/borse-zaini-pelle-palloni-usati/">https://www.bgbl.it/borse-zaini-pelle-palloni-usati/</a>

Digitalrunway; "Designers". Available on: <a href="https://digitalrunway.altaroma.it/it/designer/30317/">https://digitalrunway.altaroma.it/it/designer/30317/</a>

Mediakey; 2019; "Il lancio di BGBL cool brand di Mipel 115". Available on: https://www.mediakey.tv/leggi-news/o-zone-cura-il-lancio-di-bgbl-cool-brand-di-mipel-115-una-collaborazione-tutta-trevigiana-per-il-progetto-di-comunicazione-del-nuovo-marchio-di-luxury-upcycling

Facebook; official BGBL page. Available on: https://www.facebook.com/bgbl.official/

Ob-fashion; 2020; "Talk about genderless, fashion tells about what we are". Available on: https://ob-fashion.com/blogs/blog/talk-about-genderless

Whiteshow; 2021; "BGBL interview". Available on: https://www.whiteshow.com/it/magazine-contemporary-makers/bgbl-interview

Lifegate; Dardana; 2019; "Regenesi crea bellezza dai rifiuti, così un'impreditrice italiana vuole trasformare la moda e il design". Available on: https://www.lifegate.it/regenesi-maria-silvia-pazzi

Lifegate; Riccio; 2017; "File bag, la borsa componibile fatta con con scarti di pelle rigenerate". Available on: https://www.lifegate.it/file-bag-borsa

Regenesi; official website. Available on: <a href="https://www.regenesi.com/pages/about-regenesi">https://www.regenesi.com/pages/about-regenesi</a>

Book; Sacchi; "La fenice e il camaleonte nella moda e nel design: re cycling e up cyling".

Lesfleursstudio; official website. Available on: <a href="https://lesfleurstudio.com/about/">https://lesfleurstudio.com/about/</a>

Sickymag; Ferrera; 2021; "Maria Bernad unveils her universe of vintage and upcycling: le fleurs studio". Available on: <a href="https://sickymag.com/maria-bernad-unveils-her-universe-of-vintage-and-upcycling-les-fleurs-studio/">https://sickymag.com/maria-bernad-unveils-her-universe-of-vintage-and-upcycling-les-fleurs-studio/</a>

Instagram; official page. Available on: <u>LES FLEURS (@lesfleurstudio) • Foto e video di</u> Instagram

Forbes; 2021; *"Forbes personal shopper"*. Available on: <a href="https://www.forbes.com/sites/forbes-personal-shopper/2021/12/27/face-massagers/?sh=2f7e672e16a5">https://www.forbes.com/sites/forbes-personal-shopper/2021/12/27/face-massagers/?sh=2f7e672e16a5</a>

Casagin; Donolato; 2021; "Tradizioni indigene e tribù: radici della sostenibilità". Available on: <a href="https://www.casagin.com/magazine/tradizioni-indigene-e-tribu-radicidella-sostenibilita/">https://www.casagin.com/magazine/tradizioni-indigene-e-tribu-radicidella-sostenibilita/</a>

Lifegate; Dardana; 2021; "Casagin realizza capi d'abbigliamento in fibre vegetali biodegradabili". Available on: <a href="https://www.lifegate.it/casagin-capi-abbigliamento-fibre-vegetali-biodegradabili">https://www.lifegate.it/casagin-capi-abbigliamento-fibre-vegetali-biodegradabili</a>

Feelingfelt; official website. Available on: https://www.feelingfeltdesign.com/

E-prints; 2015; "What is sustainable fashion? University of Sheffield". Available on: https://eprints.whiterose.ac.uk/99507/1/PDF Proof%20of%20accepted%20

Ethicalfashion; "How can sustainability principles be applied?". Available on: <a href="https://ethicalfashion.online/news-views/how-can-sustainability-principles-be-applied-in-fashion">https://ethicalfashion.online/news-views/how-can-sustainability-principles-be-applied-in-fashion</a>

loDonna; Greco; 2021; "Bellezze nascoste: a svelarlo è un brand di accessori ecosostenibile".

Available
on:
<a href="https://www.iodonna.it/moda/news/2021/12/23/accessori-moda-ecosostenibili-che-svelano-bellezze-nascoste/">https://www.iodonna.it/moda/news/2021/12/23/accessori-moda-ecosostenibili-che-svelano-bellezze-nascoste/</a>

Regenesi; official website. Available on: <a href="https://www.regenesi.com/pages/about-regenesi">https://www.regenesi.com/pages/about-regenesi</a>

Ethicalfashion; "Why ethical fashion is important?". Available on: https://ethicalfashion.online/news-views/why-is-ethical-fashion-important

Springer Series; Volume 1; Ming-Choi and Edwin Cheng; 2015; "Sustainable fashion supply chain management: from sourcing to retailing".

Voguebusiness; Garthwaite; 2021; "Fashion's reshoring rush: why now and for how long?". Available on: <a href="https://www.voguebusiness.com/companies/fashions-reshoring-rush-why-now-and-for-how-long">https://www.voguebusiness.com/companies/fashions-reshoring-rush-why-now-and-for-how-long</a>

Compareethics; "Comfortable organic clothing: brands you need to know about".

Available on: <a href="https://compareethics.com/super-comfortable-organic-clothing-brands/">https://compareethics.com/super-comfortable-organic-clothing-brands/</a>

Vanityfair; Calabi; 2017; *"Il futuro della moda: è orange?"*. Available on: <a href="https://www.vanityfair.it/fashion/news-fashion/2017/04/19/salvatore-ferragamo-orange-fiber">https://www.vanityfair.it/fashion/news-fashion/2017/04/19/salvatore-ferragamo-orange-fiber</a>

Mckinsey; Granskog- Lee- Magnus- Sawers; 2020; "Survey: consumer sentiment on sustainability in fashion". Available on: <a href="https://www.mckinsey.com/industries/retail/our-insights/survey-consumer-sentiment-on-sustainability-in-fashion">https://www.mckinsey.com/industries/retail/our-insights/survey-consumer-sentiment-on-sustainability-in-fashion</a>

Researchgate; Rahadi; 2021; "Customer preferences on sustainable fashion purchases: a conceptual model". Available on: <a href="https://www.researchgate.net/publication/350152855">https://www.researchgate.net/publication/350152855</a> Customer Preferences on Sustainable Fashion Purchases A Conceptual Model

Europa; "Waste and recycling". Available on: <a href="https://ec.europa.eu/environment/topics/waste-and-recycling-it">https://ec.europa.eu/environment/topics/waste-and-recycling-it</a>

BBC; Beall; 2020; "Why clothes are so hard to recycle?". Available on: https://www.bbc.com/future/article/20200710-why-clothes-are-so-hard-to-recycle

Cbi; 2021; "The European market for recycled fashion". Available on: https://www.cbi.eu/market-information/apparel/recycled-fashion/market-potential

Forbes; Islam; 2021; "Fashion is overselling circularity and re-cycling – but there is hope".

Available on:

https://www.forbes.com/sites/brookerobertsislam/2021/10/01/fashion-is-overselling-circularity-and-recycling-but-there-is-hope/?sh=de761845d959

Voguebusiness; Vogue business team; 2020; "Fashion's circular economy could be worth \$5 trillion". Available on: https://www.voguebusiness.com/sustainability/fashions-circular-economy-could-be-worth-5-trillion

Europa; official website European Commission; "Un green deal europeo". Available on: <a href="https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal">https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal</a> it

Calzedonia; official website about recycling. Available on: <a href="https://www.calzedoniagroup.com/world-in-progress/il-nostro-modello-e-contributo/riciclo">https://www.calzedoniagroup.com/world-in-progress/il-nostro-modello-e-contributo/riciclo</a>

Blogs; Wood; 2017; "Regulating the Rag and Bone Man". Available on: https://blogs.loc.gov/law/2017/08/regulating-the-rag-and-bone-man/

Freitag; official website about production; "From truck till bag". Available on: https://www.freitag.ch/it/production

Digitalcommons; Sung; 2021; "Consciousness is a new beauty". Available on: https://digitalcommons.buffalostate.edu/srcc-sp21-busfashhosp/4/

Journal of international property law; Landrum; 2021; "The fashion industry's inner beauty: does the UK's fight against modern slavery measures up to its ILO obligations?". Available on: <a href="file:///C:/Users/infoa/Downloads/31008-the-fashion-industry-s-inner-beauty-does-the-uk-s-fight-against-modern-slavery-measure-up-to-its-ilo-obligations%20(1).pdf">file:///C:/Users/infoa/Downloads/31008-the-fashion-industry-s-inner-beauty-does-the-uk-s-fight-against-modern-slavery-measure-up-to-its-ilo-obligations%20(1).pdf</a>

Sciencedirect; Marques-Moreira-Cunha; 2019; "From waste to fashion- a fashion upcycling contest". Available on: <a href="https://reader.elsevier.com/reader/sd/pii/S2212827119308613?token=CF6B2C742BC458693EC29DC96A6F030F08D62F63EC7426BC0CE841E4393DEE53DEB4EDDBE46B231ED19A21356CF999FC&originRegion=eu-west-1&originCreation=20220301185222

Wetheitalians; 2021; "Italian report: economy of beauty". Available on: <a href="https://www.wetheitalians.com/web-magazine/italian-report-economy-beauty">https://www.wetheitalians.com/web-magazine/italian-report-economy-beauty</a>

Fashion history; Rabine; "Globalization and the fashion industry". Available on: <a href="https://fashion-history.lovetoknow.com/fashion-clothing-industry/globalization-fashion-industry">https://fashion-history.lovetoknow.com/fashion-clothing-industry/globalization-fashion-industry</a>

Ilpost; 2021; "Victoria's secret non avrà più le sue angels". Available on: <a href="https://www.ilpost.it/2021/06/17/victorias-secret-cambio-immagine/">https://www.ilpost.it/2021/06/17/victorias-secret-cambio-immagine/</a>

Reuteurs; Anzolin-Aloisi; 2021; "How global supply chains are falling out of fashion?". Available on: <a href="https://www.reuters.com/business/retail-consumer/how-global-supply-chains-are-falling-out-fashion-2021-09-30/">https://www.reuters.com/business/retail-consumer/how-global-supply-chains-are-falling-out-fashion-2021-09-30/</a>

Voguebusiness; Biondi; 2021; "Supply chain disruption: fashion's Christmas concern". Available on: <a href="https://www.voguebusiness.com/consumers/supply-chain-disruption-fashions-christmas-concern">https://www.voguebusiness.com/consumers/supply-chain-disruption-fashions-christmas-concern</a>

lodonna; D'Amelio; 2020; "Giorgio Armani, come deve cambiare la moda dopo il coronavirus".

Available
on:
<a href="https://www.iodonna.it/moda/news/2020/04/06/giorgio-armani-coronavirus-moda-come-cambiera/">https://www.iodonna.it/moda/news/2020/04/06/giorgio-armani-coronavirus-moda-come-cambiera/</a>

Recoverbrands; 2018; "History of Upycling". Available on: https://recoverbrands.com/blogs/sustainability-tips/history-of-upcycling

Staiymagazine; Srivastava; 2021; "Is up-cycling the future of fashion?". Available on: https://staiymagazine.com/is-upcycling-the-future-of-fashion/

"Unraveled, the life and death of a garment"; Maxine Bédat; 2021.

"The new global road map, enduring strategies for turbulent times"; Pankaj Ghemawat; Harvad Business Review Press; 2018.

Alliedmarket; Parihar, Prased; 2021; "Global recycled textile market by type and end-user industry: global opportunity analysis and industry forecast 2020-2027".

### FIGURES:

Figure1: https://stock.adobe.com/it/images/comparing-circular-and-linear-economy-showing-product-life-cycle-natural-resources-are-taken-to-manufacturing-after-usage-product-is-recycled-or-dumped-waste-recycling-management-concept/187642816

Figure 2: <a href="https://ecojungle.net/post/the-most-polluting-industries-in-2021/">https://ecojungle.net/post/the-most-polluting-industries-in-2021/</a>

Figure 3: <a href="https://www.abc.net.au/news/2017-03-28/the-price-of-fast-fashion-rivers-turn-blue-tonnes-in-landfill/8389156">https://www.abc.net.au/news/2017-03-28/the-price-of-fast-fashion-rivers-turn-blue-tonnes-in-landfill/8389156</a>

Figure 4: https://www.voguebusiness.com/consumers/china-resale-market-consumer-trust (China secondhand luxury market development research report).

- Figure 5: <a href="https://www.salvationarmytexas.org/corpuschristi/center-of-hope/">https://www.salvationarmytexas.org/corpuschristi/center-of-hope/</a>
- Figure 6: Dead White Man's Clothes | Atmos
- Figure 7: <a href="https://www.statista.com/statistics/1008266/share-of-women-who-bought-secondhand-apparel-footwear-or-accessories-by-age-worldwide/">https://www.statista.com/statistics/1008266/share-of-women-who-bought-secondhand-apparel-footwear-or-accessories-by-age-worldwide/</a>
- Figure 8: https://boutique.humbleandrich.com/the-realreal-review/
- Figure 9: <a href="https://fashionchinaagency.com/in-china-secondhand-is-the-new-challenge-for-fashion-brands/">https://fashionchinaagency.com/in-china-secondhand-is-the-new-challenge-for-fashion-brands/</a>
- Figure 10: <a href="https://www.adepp.info/2019/10/le-casse-e-gli-investimenti-esg/">https://www.adepp.info/2019/10/le-casse-e-gli-investimenti-esg/</a>
- Figure 11: <a href="https://www.iamfashionrose.com/it/slow-fashion-moda-etica-con-valori/">https://www.iamfashionrose.com/it/slow-fashion-moda-etica-con-valori/</a>
- Figure 12: <a href="https://lot.dhl.com/5-emerging-risk-trends-for-global-supply-chains-to-watch-in-2021/">https://lot.dhl.com/5-emerging-risk-trends-for-global-supply-chains-to-watch-in-2021/</a>
- Figure 13: <a href="https://foreignpolicy.com/2022/03/05/sri-lanka-organic-farming-crisis/">https://foreignpolicy.com/2022/03/05/sri-lanka-organic-farming-crisis/</a>
- Figure 14: <a href="https://www.vanityfair.it/fashion/news-fashion/2017/04/19/salvatore-ferragamo-orange-fiber">https://www.vanityfair.it/fashion/news-fashion/2017/04/19/salvatore-ferragamo-orange-fiber</a>
- Figure 15: <a href="https://www.dreamstime.com/orange-peel-fabric-fabric-production-production-waste-orange-fiber-silk-orange-peel-alternative-method-fabric-image232753647">https://www.dreamstime.com/orange-peel-fabric-fabric-production-production-waste-orange-fiber-silk-orange-peel-alternative-method-fabric-image232753647</a>
- Figure 16: <a href="https://www.mckinsey.com/mgi/our-research/all-research">https://www.mckinsey.com/mgi/our-research/all-research</a>
- Figure 17: <a href="https://about.hm.com/news/general-news-2019/on-the-way-towards-using-100--sustainable-materials.html">https://about.hm.com/news/general-news-2019/on-the-way-towards-using-100--sustainable-materials.html</a>
- Figure 18: <a href="https://eridirect.com/sustainability/recycling-trends/">https://eridirect.com/sustainability/recycling-trends/</a>
- Figure 19: <a href="https://www.suseet.eu/2020/02/29/climate-change-eu-strategy-european-green-deal/">https://www.suseet.eu/2020/02/29/climate-change-eu-strategy-european-green-deal/</a>
- Figure 20: <a href="https://www.progettoquid.com/">https://www.progettoquid.com/</a>
- Figure 21: https://journals.openedition.org/factsreports/5143

- Figure 22: <a href="https://www.amazeelabs.com/en/journal/upgrading-vs-upcycling-how-stay-ahead-curve">https://www.amazeelabs.com/en/journal/upgrading-vs-upcycling-how-stay-ahead-curve</a>
- Figure 23: <a href="https://www.cnet.com/culture/the-sims-moschino-fashion-clothing-line-will-turn-you-into-a-real-life-avatar/">https://www.cnet.com/culture/the-sims-moschino-fashion-clothing-line-will-turn-you-into-a-real-life-avatar/</a>
- Figure 24: https://m.facebook.com/Atelierflorania/
- Figure 25: <a href="https://www.atelierflorania.com/22298072">https://www.atelierflorania.com/22298072</a>
- Figure 26: <a href="https://www.rinascente.it/it/item/vitelli-maglione-doomboh-0003130455001">https://www.rinascente.it/it/item/vitelli-maglione-doomboh-0003130455001</a>
- Figure 27: <a href="https://www.salewa.com/">https://www.salewa.com/</a>
- Figure 28: https://it.fashionnetwork.com/news/freitag-ha-presentato-i-suoi-primicapi-di-abbigliamento-confezionati-col-tessuto-ecologico-f-abric-,440507.html
- Figure 29: <a href="https://redoupcycling.com/2020/11/19/redo-store-xxl/">https://redoupcycling.com/2020/11/19/redo-store-xxl/</a>
- Figure 30: <a href="https://maglow.it/products/flambe-m-nero">https://maglow.it/products/flambe-m-nero</a>
- Figure 31: https://www.freitag.ch/it/store/freitag-flagship-store-zuerich
- Figure 32: <a href="https://it.fashionnetwork.com/news/freitag-ha-presentato-i-suoi-primi-capi-di-abbigliamento-confezionati-col-tessuto-ecologico-f-abric-,440507.html">https://it.fashionnetwork.com/news/freitag-ha-presentato-i-suoi-primi-capi-di-abbigliamento-confezionati-col-tessuto-ecologico-f-abric-,440507.html</a>
- Figure 33: <a href="https://www.bgbl.it/borse-zaini-pelle-palloni-usati/">https://www.bgbl.it/borse-zaini-pelle-palloni-usati/</a>
- Figure 34: <a href="https://www.regenesi.it/blogs/stories/file-bag-the-bag-that-transforms-with-you">https://www.regenesi.it/blogs/stories/file-bag-the-bag-that-transforms-with-you</a>
- Figure 35: <a href="https://lesfleurstudio.com/about/">https://lesfleurstudio.com/about/</a>
- Figure 36: <a href="https://www.casagin.com/shop/donna/in-primo-piano/fine-collezione/">https://www.casagin.com/shop/donna/in-primo-piano/fine-collezione/</a>
- Figure 37: <a href="https://materialdistrict.com/material/pinatex/">https://materialdistrict.com/material/pinatex/</a>
- Figure 38: <a href="https://www.campaignlive.com/article/benetton-paints-world-orange-support-un-women/1374568">https://www.campaignlive.com/article/benetton-paints-world-orange-support-un-women/1374568</a>
- Figure 39: <a href="https://www.freitag.ch/it/production">https://www.freitag.ch/it/production</a>