Textile Sustainability Approach. The Dyloan Experience*

Loreto Di Rienzo**

Abstract

Dyloan group is a combination of different organizations with a shared vision. Bond Factory, located in the Italian region of Abruzzo, the manufacturing site able to create unique collections and products with a flexible and pioneering eye for the industry; and D-house, in the city of Milan, the R&D division and showroom that empowers technological innovation and creative synergies conquering the heart of fashion & design professionals and brands.

The companies that have decided to embrace the values of sustainability and resilience and have chosen to go against the market trends of the last decade today can claim a position of strong advantage among stakeholders, both from an economic and a cultural angle.

Keywords: Textile Sustainability; Fashion; Bond Factory; Dyloan; Global Markets

1. Our Story Starts in 1987

Our story starts in 1987. My sister Anna Maria and me inherited the craftsmanship cultural heritage of our mother, a skilled embroiderer, and decided to combine it together with the new technologies that, in that period, were already starting to revolutionize the industrial fashion world.

Today, Dyloan group is a combination of different organizations under the guide of two macro-entities with a shared vision: Bond Factory, located in the Italian region of Abruzzo, the manufacturing site able to create unique collections and products with a flexible and pioneering eye for the industry; and D-house, in the city of Milan, the R&D division and showroom that empowers technological innovation and creative synergies conquering the heart of fashion & design professionals and brands.

Bond Factory embodies the group's passion for innovation and technologies applied to the manufacturing industry. Its mission is to "think locally, act globally": that's the idea we follow to prototype and produce garments and accessories to serve high fashion all over the world, but always keeping a firm eye to our territory, its people and heritage.

D-house brings to the very heart of Milan an access to the whole range of services offered by the Dyloan group; since its mission is to bring innovation to the fashion world, no place could work better than the city center of Milan. D-house embeds Manufacturing and R&D implementing and customizing fabrics, semi-products,

Edited by: Niccolò Cusano University

ISSN: 1593-0319

Di Rienzo, L. (2022). Textile Sustainability Approach. The Dyloan Experience. *Symphonya. Emerging Issues in Management (symphonya.unicusano.it)*, (7), 71-77.

https://dx.doi.org/10.4468/2022.1.07dirienzo



^{*} Invited Article

^{**} Technology Ambassador and R&D Director, Dyloan (loretodirienzo@dyloan.org)

accessories and so on, but also consulting, providing engineering support, organizing events to help clients to make their vision happen. D-house enhances synergies with international partners and offers highly specialized courses, run by D-house Academy, in order to learn the potential and practical applications of the most innovative technologies.

We have chosen to create an ecosystem that reflects our vision and that could involve the best national and international universities for better sharing the priceless value of "know-how".

The implementation strategy of our corporate mission lies in the close relationship between material and immaterial values. We have always been driven by an innovation aim rather than a financial one: we believe in creating equal synergies enhancing the company's cultural and financial growth as well as the one of each individual.

2. From Shakeout to a Sustainable Company: Dyloan's Path

In order to better explain the crucial role played by Dyloan, I'll briefly introduce the complexity of the fashion industry.

For over 50 years, Italy has been renowned for its high-quality craftsmanship, sharp tailoring and luxury designs, as well as manufacturing and exporting fashionable items as an integral part of the country's economy. Fashion still holds a solid international leadership.

The characteristics of the Italian fashion production model have been extensively studied: a fragmented industry mainly populated by medium-small size companies, effective integration between creative and industrial production, extensive production chain of intermediate goods, enhancement of the artisan tradition and high reputation of the "Made in Italy", an identity that is integral part of Dyloan group.

The importance of fashion in everyday life has seen an exponential increase on a global scale during the last 30 years. The growth of the global economy has made this sector accessible also to emerging countries such as China, India and Brazil. The rise of Fast Fashion has also blurred the lines between luxury brands and the new "fast fashion" market. There have been heavy changes in the macroeconomic context with enormous consequences on the fashion system. The most important factors were the liberalization of intercontinental trade and the "China factor": the exports of the "Country of the Dragon" have grown up to 40% of the world market share, and today its domestic market exceeds 30% of world clothing consumption.

Right after this growth cycle, between 2000 and 2014 there was a downsizing of the market which decreased by 16% in the eurozone. Italy registered a - 12.5%, - 36% in France, -26% in the United Kingdom and -25% in Spain. The Italian industrial system, also thanks to its solid value structure, has suffered less than other countries and has been able to assert itself more and more within the European and global production landscape.

Notwithstanding, the shakeout of small and medium-sized enterprises – decreased by thirty thousand units in Italy – put a strain on the entire production chain which, however, as previously indicated, was able to endure better than in other European countries.

Edited by: Niccolò Cusano University ISSN: 1593-0319

□ In the Italian production districts, there was a firm resistance to the new trends of foreign markets; outside those areas, however, there was a notable downsizing of the clothing manufacturing system, which underwent the rapid process of shifting manufacturing.g to eastern regions. This situation can be summarized in a clear and distinct segmentation: large companies and groups run by managerial organizations, aimed at a global market; medium-sized companies (that today are the major players in the national and international market); small and micro-enterprises operating in the supply and subcontracting chain, forced into a fierce competition, subjected to big luxury groups' rules.

The competitive spirit suggested by this new commercial system put the entire Italian fashion chain in crisis, silently annihilating the original collaborative behavior of our national brand.

Dyloan was founded in the flourishing decade of the 90s in Italy – when the development of prêt-à-porter luxury fueled and strengthened the entire industrial chain. Then, we were a small company driven by a strong passion for the fashion world, with about twenty employees and ambitious growth objectives. The uniqueness of our reality has always found space in an innovative and artisanal culture.

During that period of change – after the year 2000 – we were seeing manufacturing companies similar to ours, failing or relocating to countries with poor labor costs in order to compete in the new market. But we simply couldn't give up on our territory: we believed in our values and couldn't step on them in the name of profit. We found ourselves in an increasingly dismembered supply chain, in an isolated and highly competitive environment in which it looked impossible to find the synergies we wished to achieve and create. Our uniqueness, given by the use of pioneering technologies such as heat sealing, lasers, thermoforming, ultrasonic and high frequency applications, has made us strong in a weak market. Our exciting curiosity, mutual trust and innovative corporate culture has rewarded us in a moment of economic, cultural and semantic crisis of the Italian manufacturing industry.

When in 2010 I met Paolo Ricotti, I learned about "sustainability" for the first time. We at Dyloan were curious, visionary, and actively engaged in a battle against a changing economy that was about to overwhelm us; we had lots of ideas, but the market wasn't encouraging our vision. Thanks to a fruitful exchange of opinions with the PLEF Association, we learned how sustainability was something we were already implementing without even knowing it.

While approaching the issue of sustainability, we have decided to go on following the same path my sister Anna Maria and me had already undertaken many years ago: appraising the territory, producing small quantities of goods but with the highest quality.

In that cultural, social, environmental and economic value we have seen our future. Right from the start, we have implemented new activities to provide value to our employees inside and outside the company. We have identified brands, initially French brands, that were not looking for a mere manufacturer, but rather a source of inspiration and a sort of partner to share know-how.

We felt the need to create a new language, a new way of thinking about the product and the collaborations during the creative and production phase. In the industry in which we operated sustainability was non-existent. Along the entire value chain,

Edited by: Niccolò Cusano University

ISSN: 1593-0319

the traceability of products and their impacts was not at all considered. Everything was produced according to aesthetic paradigms created on the tables of the style offices, where designers performed a crucial role for the entire field.

Therefore, we had the idea to open a new space to encourage a free exchange of views on innovation and technology applied to the Italian entrepreneurship world. We have inaugurated our first showroom in Milan where we have started developing projects with a pioneering sense of inclusion and a unique fashion & design multidisciplinary approach. We wanted to revolutionize the way of thinking about a product both communicating with the producers of raw materials, and sharing technological know-how with designers and artists in order to generate awareness and responsible products. We have thus tried to stop the verticalization of the industry which increasingly oppresses the most creative and innovative realities, proposing an alternative of sharing values in a horizontal system.

This new way of thinking, imagining the new projects of the fashion world, we wanted to share it with the youngest generations - that is to the designers of tomorrow - or our potential future customers. We therefore immediately started interacting with universities and schools, as well as involving young designers to develop projects destined to the most important trade fairs and events on the European scene, where the mutual synergy was aimed to create ambitious and highly visible projects.

Before the pandemic, the topic of sustainability was not so widely discussed; but today, we are living in a completely different situation. Sustainability is a matter of relevance that also became a source of profit, and soon associated with a new negative phenomenon called "green washing".

3. The Sustainable Approach in the International Fashion Industry

Sustainable fashion was one of the topics addressed by the journalist Friedman during the Copenhagen Fashion Summit 2014. On that occasion, she said she found it difficult to put together these two words for her speech: Fashion and Sustainable. In her view, in fact, Sustainable Fashion is like boiling ice, lucid madness, and illustrious unknown: a contradiction in terms that cannot coexist.

The fashion industry operates in a highly competitive market dominated by the presence of global brands. In recent times, despite the deep financial crisis of the last decade, it has achieved rapid growth and big changes.

The most important changes affecting the demand in the fashion industry can be summarized as follows: attention to sustainability and the circular economy. Sustainability has recently become a new important driver in the purchasing decisions of consumers, who expect more and more transparency along the entire value chain; they want to have access to more information, both on the origin of the goods and on the materials quality. Therefore, attention to sustainability undoubtedly represents one of the most important "trends" of recent years, and an essential value for Dyloan.

Despite this, we must reiterate that sustainability, by definition, is not and must not be a rapid and speculative development process. Sustainable transformation must be a collective and conscious progress, a gradual advancement or transformation marked by an ever-greater increase in capacity and potential. At the down of this global change, we realized that our preparation in terms of sustainability was a rare privilege. At the beginning of our story, we at Dyloan felt alone in our consciousness about sustainability, unaware of the revolution that would happen after less than a

Edited by: Niccolò Cusano University

ISSN: 1593-0319

decade. We therefore decided, not without facing some difficulties, to create an ecosystem based on synergies, shared values and know-how generated by networking with designers, technologies and luxury brands. The industrial manufacturing system of fashion had forgotten its roots, placing individuality before the community in a historical moment in which the fashion industry had embarked on an increasingly dynamic and overwhelming path. A system that, in order to be better delivered and managed, needed to come back to a collective perspective.

The first projects we developed sought to achieve a multiple discipline that linked the designer with the entire production chain through knowledge, bringing a contributing role to every player in the fashion system. In this way, we thought we could raise awareness and improve the entire creative and industrial process which, expressed through a shared knowledge, would generate a sustainable product, rich in intangible as well as material values.

In this technocratic century, in which the development of technologies exceeds technological aspiration, we could not avoid focusing our research activities on those technologies that we still believe to be relevant and revolutionary.

Laser cutting, heat sealing, ultrasound and high-frequency are the technological bricks on which we have based our know-how.

The application of this strategy has been extended from research to commerce. We invited international luxury brands designers to visit our company and to educate them on our technologies; to foster their skills in order to design a highly creative product with an intrinsic value of sustainability and responsibility.

4. Sustainability in the World of Fashion

We are part of a system that is currently chasing sustainability. The world of fashion is one of the latest industries to realize the enormous impact sustainability generates (second only to the oil industry). I will not go into detail about various scandals that in recent years have helped consumers in their awareness path towards the importance of sustainability; but I will talk about how our company has decided to address this issue in terms of training and sharing.

Not only brands: we realized that a European political movement was necessary to provide the fashion industry with new laws and regulations. Our customers and collaborators in the fashion world renew their trust in us by continuing to rely on our special, sustainable projects.

Round tables about sustainability. Our strong belief is that sustainability is not a promise but a need to be implemented, a business culture that should be able to change and adopt a systemic supply chain approach.

Already 15 years ago, Dyloan understood that sustainability would have impacted the economy in a radical way; today, according to our concrete and positive results, we believe we have taken the right path.

Right during the pandemic, we decided to organize a cycle of round tables whose aim was to raise awareness and push designers, younger generations, companies, associations and institutions to face the issues of economic, social and environmental sustainability.

Edited by: Niccolò Cusano University ISSN: 1593-0319

D-Refashion Lab. This project intervenes on the Brand's overstock by enriching it through Dyloan technologies to create new commercial opportunities. The Brand uses Dyloan's customization services on his overstock to modify the goods according to the Brand's needs and style. Products are then distributed through e-commerce and Flagship Store, or ourselves can support the distribution on other platforms. This activity is usually quoted within CRS approach.

YCLOS. This is one of our most ambitious projects of the last few years. During the pandemic, we analyzed the impact of personal protection equipment (PPE) on the environment and its related issues. We explored the possibility of replacing the polypropylene used in the production of disposable PPE with polyester to obtain new washable and recyclable devices with the aim of following the principles of the circular economy.

Indeed, the YCLOS project aims to shift the production paradigm of single-use devices from linear to circular. The results obtained showed that the YCLOS fabric, 100% polyester, can be used in the medical sector with equal results compared to those of polypropylene as regards as biological and chemical risks (also from a law and regulations point of view); superior results were obtained as regard as mechanical resistance and breathability.

Obviously, these are just some of the projects that in recent years have represented a new focus, which is increasingly investigating the issue of sustainability and thoroughly addressing industrial problems.

In this flourishing moment of global awareness, luxury brands and the entire industrial system feel the need to overcome an immense void generated in the last century. It is interesting to note how the driving industry of fashion is involuntarily involving satellite industries in the process, creating a collaborative motion that reach his full potential in younger start-ups.

At the same time, we have noticed that the health crisis of 2020 has brought an increase in units within the manufacturing sector. The relaunch of Italian manufacturing, strongly desired by luxury brands, has generated a huge volume of "demand", however satisfied by a scarce supply. Those who exported their business abroad, today are coming back to Italy to take part in this positive trend of relocation in the national supply chain.

The companies that have decided to embrace the values of sustainability and resilience and have chosen to go against the market trends of the last decade – like we did –, today can claim a position of strong advantage among stakeholders, both from an economic and a cultural angle.

We are facing this constructive crisis as main players rather than spectators.

Edited by: Niccolò Cusano University

ISSN: 1593-0319

Bibliography

- Arrigo, E. (2020). Global Sourcing in Fast Fashion Retailers: Sourcing Locations and Sustainability Considerations. *Sustainability*, 12(2), 1-22. http://dx.doi.org/10.3390/su12020508
- Arrigo, E. (2015). Corporate Sustainability in Fashion and Luxury Companies. *Symphonya*. *Emerging Issues in Management*, (*symphonya.unimib.it*), (4), 9-23. http://dx.doi.org/10.4468/2015.4.02arrigo
- Brondoni, S. M., & Mosca, F. (2017). Ouverture de 'Integrated Corporate Social Responsibility'. *Symphonya. Emerging Issues in Management, (symphonya.unimib.it)*, (1), 1-6. http://dx.doi.org/10.4468/2017.1.01ouverture
- Brondoni, S. M. (2014). Global Capitalism and Sustainable Growth. From Global Products to Network Globalisation. *Symphonya. Emerging Issues in Management*, (symphonya.unimib.it), (1), 10-31. https://dx.doi.org/10.4468/2014.1.02brondoni
- Gazzola P., Pavione E., Pezzetti R., & Grechi D. (2020). Trends in the Fashion Industry. The Perception of Sustainability and Circular Economy: A Gender/Generation Quantitative Approach, Sustainability, 12(7), 2809. https://doi.org/10.3390/su12072809
- Hu, S., Henninger, C. E., Boardman, R., & Ryding, D. (2019). Challenging Current Fashion Business Models: Entrepreneurship through Access-Based Consumption in the Second-Hand Luxury Garment Sector within a Circular Economy. Sustainable Luxury, 39-54. https://doi.org/10.1007/978-981-13-0623-5_3
- Ki, C. W., Chong, S. M., & Ha-Brookshire, J. E. (2020). How Fashion Can Achieve Sustainable Development through a Circular Economy and Stakeholder Engagement: A Systematic Literature Review. Corporate Social Responsibility and Environmental Management, 27(6), 2401-2424. https://doi.org/10.1002/csr.1970
- Plata, E. (2015). The Evolution of Sustainability Perceptions in Mass-Market Products. *Symphonya. Emerging Issues in Management, (symphonya.unimib.it)*, (5), 29-35. https://dx.doi.org/10.4468/2015.5.03plata
- Ricotti, P. (2016). Renaissance Economy, Amazon Kindle book.
- Salvioni, D. M., & Almici, A. (2020). Circular Economy and Stakeholder Engagement Strategy. *Symphonya. Emerging Issues in Management, (symphonya.unimib.it)*, (1), 26-44. http://dx.doi.org/10.4468/2020.1.03salvioni.almici
- Salvioni, D. M., & Gennari, F. (2017). CSR, Sustainable Value Creation and Shareholder Relations. Symphonya. Emerging Issues in Management, (symphonya.unimib.it), (1), 36-49. http://dx.doi.org/10.4468/2017.1.04salvioni.gennari
- Salvioni, D. M. (2003). Corporate Governance and Global Responsibility. *Symphonya. Emerging Issues in Management*, (symphonya.unimib.it), (1), 44-54. http://dx.doi.org/10.4468/2003.1.05salvioni

Edited by: Niccolò Cusano University ISSN: 1593-0319