

DESIGN SOLUTIONS FOR CONSCIOUS AND SUSTAINABLE FASHION CONSUMPTION

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Abstract

The paper refers to the extensive fashion consumption of our times, focusing on the emerging target audience and the level of awareness regarding fashion industry sustainability. Through an analysis of the current state of the art and virtuous sustainable case studies, the paper aims to present possible emergent service design solutions for more sustainable and conscious fashion consumption that are quietly reshaping the fashion market. Second-hand shopping, collaborative sharing of wardrobes, and the rediscovery of craftsmanship are creating new experiences and opportunities to engage with fashion, modifying the communication strategies and policies of several brands in order to be chosen by more conscious consumers, such as the Gen Z community.

Keywords: *Service Design; Second Hand; Sharing Fashion; Custom Made Fashion; Gen Z*

FASHION, CONSUMPTION AND CONTEMPORARY VALUES

The consumption is one of the main driving forces of the global economy, while it continues to impact the health of the planet (Giannetti et al., 2023). In recent years, the fast fashion phenomenon has emerged as a central issue connected to sustainability, positioning it as the second most environmentally damaging industry after the oil one (Bailey et al., 2022). This has led to significant global challenges in managing textile waste, as the majority of textile products are discarded in landfills, despite their potential for recycling and reuse.

The phenomenon of compulsive shopping among consumers has expedited an over production and

consumption cycle of goods, especially during the 2020 – the covid period -, largely due to various platforms and companies offering free returns (Maraz et al., 2022).

Often consumers are not completely aware of the unsustainability of the fashion industry, mainly due to the poor and misleading brand communication about the production, the supply of raw materials, the manufacturing process, the transportation, the use, and disposal of clothing. The greenwashing practices, employed by some companies to appear more sustainable than they actually are, contribute significantly to the ongoing perpetuation of the issue (Peña et al., 2023) distorting the public perception regarding the severity of environmental problems thereby indirectly contributing to the

exacerbation of the ecological crisis.

The public attention is increasingly critical towards the fashion industry and much more careful to the environmental impact of the different fashion brands. The acts of denunciation against the fashion industry are countless and increasingly forceful, including those from figures within the fashion system itself. One example is *Junk*, the docuseries co-produced by Will Media and Sky Italia with Matteo Ward, CEO and co-founder of WRÅD, benefit corporation and design studio dedicated to sustainable innovation and social change, but also former senior manager of Abercrombie and Fitch. Circular economy principles are becoming increasingly important in this sector, known for its significant environmental footprint, urging for necessary sustainable reforms (Hugo et al., 2021). In 2018, the industry was responsible for emitting 2.1 billion tons of greenhouse gasses, accounting for about 4% of worldwide emissions (Berg et al., 2020).

The spread of globalization has greatly exacerbated the issue of excessive consumption in fashion (Diddi et al., 2019). According to the Ellen MacArthur Foundation report (Ellen MacArthur Foundation, 2017), approximately \$500 billion are lost annually due to garments that are only worn a few times before turning into waste without being donated or recycled.

This trend in clothing consumption stems from various factors, among which the fast fashion industry¹ plays a prominent role by offering an increased number of new clothing collections every year at very low prices. The significantly cheap costs come from the exploitation of people and the environment², a problem which has drawn scrutiny to the fashion system and sparked the ongoing trend reversal.

The attractiveness of the fashion system is notably high due to its communicative value. Clothing has been serving as a privileged channel of communication for the younger generations since the 1960s (Giraldi, 2022), conveying messages, values and ideas in which people recognize themselves.

1 A term used to describe an accelerated fashion business model that is characterized by increased numbers of new fashion collections every year, quick turnarounds and often low prices. from London's fashion footprint. An analysis of clothing material flows, emissions and levers for climate action in London, June 2023

2 For example, in this regard, see the exploitation of the populations and territories of India, Bangladesh, Chile, Ghana, documented by Matteo Ward in the series *Junk - Full Closets*.

Moreover, clothing reflects hopes, social and personal attitudes, and stances. Therefore, garments are laden with immaterial and connotative messages.

Currently, fashion system clothing expresses social values tied to inclusion, acceptance of diversity, and social commitment, among others, mostly representing Gen Z thoughts and attitudes. These values reflect the growing awareness of social responsibility and inclusivity among young consumers, prompting them to seek out brands and products that align with their values and beliefs³. Consequently, the industry faces a growing call for the adoption of eco-friendly practices in response to its adverse effects (Kim et al., 2021), prompting a call to action for immediate change (Berg et al., 2020). In this context, the United Nations Department of Economic and Social Affairs for Sustainable Development strives to mitigate the adverse environmental and social effects associated with the fashion industry (Garcia-Ortega et al., 2023). Specifically targeting Sustainable Development Goal 12 *Responsible Consumption and Production*, the United Nations seeks to decrease waste generation through prevention, reduction, recycling, and reuse, while urging companies to embrace sustainable practices (i.e. produce less to recycle less).

The shift towards sustainability is influencing new generations' views on the fashion industry, reflecting a new societal mindset (Gazzola et al., 2020). Several elements, including the rise of digital technology and shifting generational dynamics, have fueled the expansion of new trends of fashion consumption. Particularly, consumers from the newer generations (Gen Z and Millennials) exhibit a heightened focus on sustainability compared to Generation X and the preceding ones (Gazzola et al., 2020), showing a greater inclination towards alternative consumption types over traditional fast fashion brands.

These new consumption choices are necessarily impacting the contemporary fashion industry landscape, influencing the communication strategies of fashion brands, which often are rethinking their policies in order to reach and be

3 The paper refers to different studies about the perceptions, attitudes and values of generation Z consumers, conducted by: Nguyen, M.T.T. and all (2019); Kovacs, I. (2021); Arora, N., Manchanda, P. (2022); Dragolea, L.-L., Butnaru, G.I., Kot, S., Zamfir, C.G., Nuță, A.-C., Nuță, F.-M., (2023); Cristea, D.S.; Ștefănică, M., (2023); Gomes, S.; Lopes, J.M.; Nogueira, S., (2023).

chosen by new generations.

In this context, the paper aims to examine the current most popular consumption trends carried out by new generations and the resulting shifts in communication design strategies adopted by several fashion brands to face this new fashion market landscape.

Moreover, the research investigates how the new values shared by Gen Z through social networks are changing the fashion market and prompting the adoption of more conscious and future-oriented business practices by several fashion brands. Furthermore, the ultimate goal of this paper is to underscore the strategic importance of design in fostering new development opportunities within the contemporary panorama of the fashion industry. Innovative design products such as virtual spaces and digital platforms, showcases their pivotal role in delivering a delightful and sustainable fashion consumption experience. Through insightful analysis and examination of notable examples, this paper aims to highlight the transformative power of design in shaping the future of fashion consumption.

THE DIGITAL GREEN GENERATIONS

The determination of birth years for Gen Z and Millennials differ among scholars and sources. Commonly the studies delineate Millennials, or Generation Y, the individuals born between 1981 to 1995, and Gen Z, as those born post-1995 until the early 2010s. Gen Z is also referred to by various nicknames including 'iGeneration', 'Gen Tech', the 'Online Generation', 'Post Millennials', and 'Switchers', reflecting their digital nativity (Dolot, 2018).

Gen Z, is emerging in the contemporary global fashion landscape as an influential key stakeholder. Young people of Gen Z are "... constantly connected using multiple platforms and digital formats simultaneously" and at the same time "Gen Z see themselves as protagonists of the contemporary age. They have strong ideals and give importance to the values they believe in: sustainability, attention to safeguarding the planet, freedom of thought, equality, authenticity and multi-culture." (Giraldi, 2023). According to this definition, Gen Z is characterized by a strong ethical sense, a commitment to sustainability, a critical approach towards traditional consumption channels, but also, since they are the first native digital generation,

by a strong need and inclination to the 'sharing' practices and values.

The desires, inclinations, and values of Gen Z are heavily influenced by their digital upbringing and societal awareness. They prioritize sustainability, community, and convenience in their choices, which is reflected in their preference for sharing services.

This generation seeks environmentally friendly alternatives and values experiences over ownership. They are drawn to sharing platforms that offer flexibility, cost-effectiveness, and social connectivity. Services like ride-sharing, bike-sharing, and accommodation-sharing resonate well with Gen Z's desire for seamless integration into their fast-paced lifestyles. Moreover, they appreciate the collaborative and communal aspects of sharing, as it aligns with their belief in social responsibility and collective well-being. Overall, Gen Z's affinity for sharing services underscores their commitment to social and environmental sustainability.

In their study, Gazzola et al. (2020) confirm that younger generations, particularly concerning consumer behavior, are increasingly focusing on sustainability and the principles of the circular economy. Moreover, several studies⁴ show that Gen Z prioritizes authenticity and ethics in consumption choices, but they are also characterized by a strong inclination towards individualism and customization, considered a means to express their uniqueness.

VIRTUAL COMMUNITIES AND FASHION CONSUMPTION

Galante Amaral and Spers (2022) have indicated that an individual's perception of consumption can impact a person's willingness to buy and altering its consumer behavior. Perception is defined as the process by which people interpret an idea or object (Ou, 2017), and it is culturally influenced. Cultural elements shape how people view the world and interpret events, but also guide the formulation of specific messages and the interpretation of these events (Ou, 2017). An individual's culture is closely related to the community to which it belongs. The new technological landscape has led to the creation of virtual communities, based on social relationships and social connections and not confined by geographical boundaries, which offer platforms for users to construct and communicate their shared

4 *Ibid.*

identities.

These communities flourish through interactivity, nurturing social connections where consumers can engage with peers who share similar interests, develop stronger bonds, and attain a sense of social status and inclusion within the community (Huangfu, 2022). Virtual communities can be found on social media, in online video games (such as *Fortnite*), and in the metaverse.

If the remarkable influence of social media is well recognized, so are the other platforms where their virtual communities could profoundly shape consumer behaviors and perceptions of ideas. Referring to Gen Z, TikTok quickly became one of the perfect virtual spaces to explore and express their identities and foster digital communities (Boffone, 2021). According to the report published by the *Morning Consult* (He, Case, Briggs, Burns, Marlett, Tran, 2024), over 69% of Gen Z users spend 4 hours of their time on the app.

Described as 'complex, cultural artifacts' (Schellewald, 2021), TikTok videos transcend the notion of being merely frivolous content devoid of significance. Instead, these creations offer deep insights into the individualities and cultures of specific persons or groups.

Within the platform are in fact identifiable countless subcultures, each of which presents its own aesthetic, set of codes, social customs, trends, and literacy practices. TikTok videos and trends serve as 'identity blueprints' mapping out and reflecting the distinctive characteristics and values of their creators and audiences (Boffone, 2022).

In this perspective, the several available social networks are not only channels for brands advertising but also vital platforms for collective engagement and the dissemination of values.

In fact, the increase in user autonomy in virtual communities makes them no longer mere passive recipients of information, but active content creators, capable of creating and promoting new values and also practices of consumption.

The ways in which virtual communities actively influence fashion consumption are countless, just consider the viral phenomenon of *Unboxing* and the current power of influencer marketing. The contribution takes into consideration three phygital alternative consumption practices that have been significantly boosted by virtual communities and Gen Z users, highlighting how the design discipline, and specifically different digital design products (digital spaces and platforms, social

networks, etc.) are established themselves as key elements for the new directions undertaken by the fashion system.

The following sections present examples of innovative service design solutions that align with the most viral contemporary sustainable consumption trends in virtual communities: thrifting or second-hand shopping, sharing fashion, and the rediscovery of craftsmanship.

THE SECOND HAND SHOPPING TREND

Second-hand shops and the idea of *thrifting* are increasingly becoming more and more popular, driven not only by the vintage trend but also by their underlying principles: reusing well-preserved items and reducing the buildup of unwanted garments.

According to the Collins definition the word 'Thrifting' refers to "the activity of searching in second-hand shops for interesting and/or valuable pieces". This phenomenon has become particularly popular among younger generations as a sustainable and eco-friendly choice, reducing the consumption of new products and thus contributing to waste reduction and environmental impact. Thrifting is also seen as a way to express one's individuality through unique fashion and style, as well as an enjoyable activity and treasure hunt for finding rare or valuable items at affordable prices (Demir et al., 2021).

The behavior of these second-hand shoppers is analyzed through the lens of conscious consumption, or green theory. This concept, introduced by Peattie in 1992, refers to the decisions made by consumers to buy or not buy products based on environmental or social considerations.

Hristova (2019) points out that the main factors propelling the second-hand market include economic, emotional, and social incentives. According to ThredUp (2022), a vast majority, 82%, of shoppers experience positive feelings when buying second-hand goods. Regarding this, Kim (2020) documented a notable increase in the popularity of secondhand stores between 2014 and 2019. They also observed a shift in the search terms associated with secondhand shopping, moving from an emphasis on cost and savings to a focus on sustainability and current trends.

Moreover, the rise of several online marketplaces, platforms and mobile apps (such as Vinted, ThredUp, Vestiaire Collective, Wallapop, and

more..) has greatly facilitated the purchasing and selling of secondhand clothing. According to its corporate website, Vinted, born in 2008, has 75 million active users all over the world. The success of these platforms, while not representing the final solution to the fast fashion industry's problems, and having in turn several and numerous criticalities, expresses a contemporary consumption trend, which gives users the opportunity to save money and be more sustainable.

The second hand fashion trend is largely viral between the Gen Z consumer, also thanks to the influence of social media, especially Tiktok (fig. 01). Gen Z's strong interest in second hand fashion is driven not only by economic considerations but also by their strong sense of environmental responsibility and a desire for individual expression. Moreover, second hand fashion, therefore, is not perceived only as a choice of style, but as part of a wider cultural and social movement. The design can actively help in developing innovative services for the promotion of more conscious consumption choices. According to the

second hand trend, the global denim brand Levi's has introduced an innovative service called *Second Hand*. This program aims to repurchase and resale of used Levi's garments directly through the brand's official platform.

This service not only allows Levi's to regain control over the market for its second-hand products but also promotes more conscious and sustainable consumption, while ensuring the brand's authenticity and quality to consumers at reduced prices. (fig. 02)

Similarly, in 2024, Carhartt initiated several initiatives to promote the second hand clothes market of their apparel, and encouraged the extension of the lifecycle of its products. The brand introduced specially designed labels that identify the various previous owners of the garments, aiming to impart authenticity and sustainable value to the products themselves. Furthermore, Carhartt offers consumers the opportunity to perform repairs independently through specific *do-it-yourself repair kits*, thus helping to reduce consumption and waste of

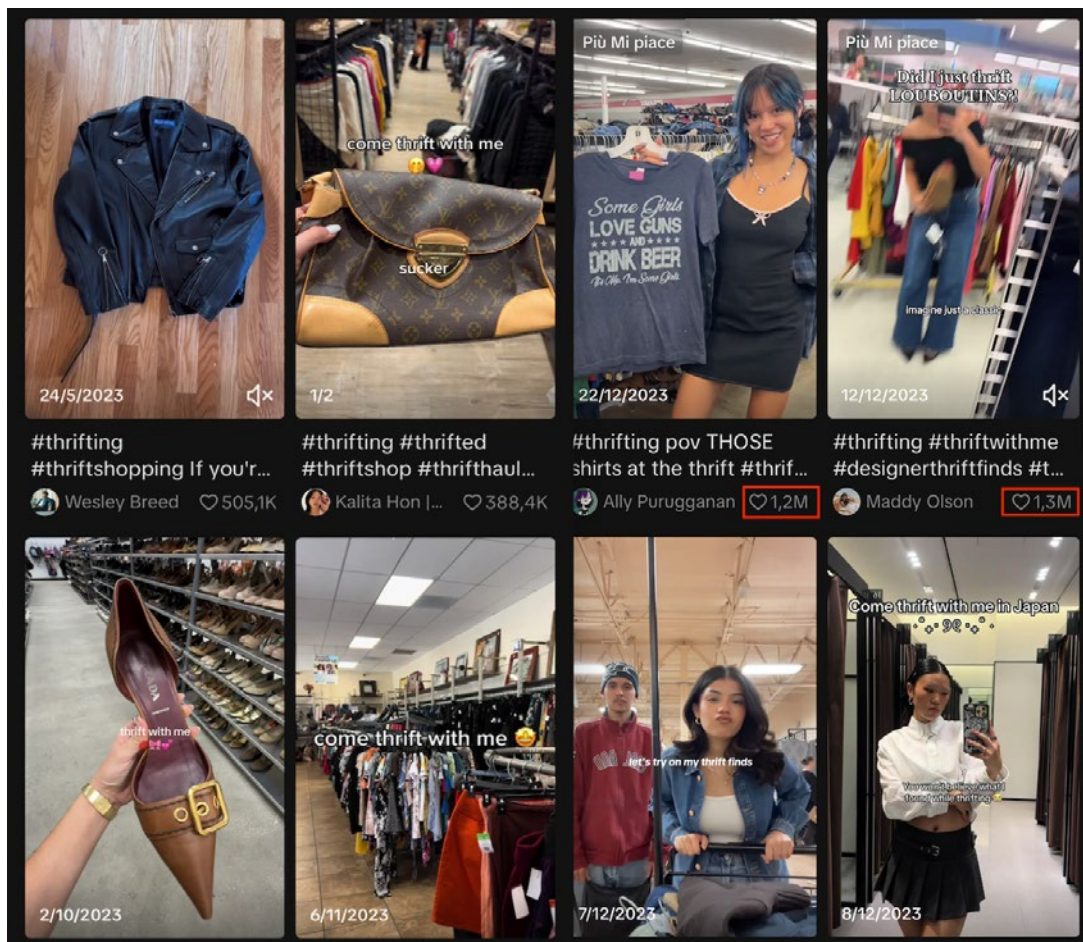


Fig. 01

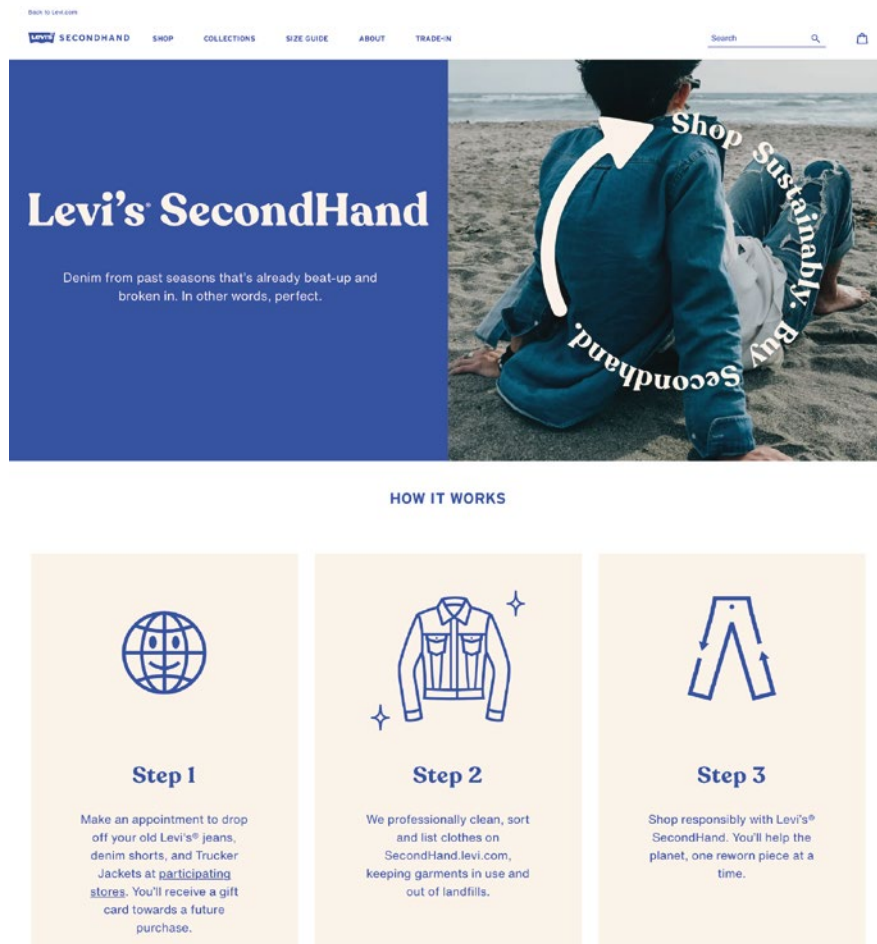


Fig. 02

resources by repairing and reusing the garments. This trend to offer service oriented to secondhand consumption is confirmed also by the S:W:A:P (Shopping Without Any Payment) Freitag initiative that represents another example of how service design can contribute to extending the product life cycle. The brand proposes, through its website, the opportunity to freely exchange one's used product through an 'exchange' service with other consumers' used Freitag products, promoting second-hand use and discouraging the purchase of new products.

THE SHARING FASHION TREND

As already mentioned, GenZ is particularly interested in sharing services as they underscore their commitment to social and environmental sustainability. The sharing trend is thus providing numerous design opportunities to embrace a more sustainable and ethical approach, not only in terms of mobility, housing, and food but also in relation to fashion consumption, through the practice of renting clothes.

Renting stands as the antithesis of fast fashion,

offering an ideal solution for those aspiring to a vast wardrobe without contributing to waste and pollution. Caterina Maestro, founder and CEO of the Milan-based fashion rental startup Dressyoucan, mentioned that Gen Z has grasped the significance of renting garments as a contribution to a greener future.

Following this scenario, in 2019 Twinset launched the *Pleasedontbuy* initiative, and the claim *rent your dream* with the aim of making their products accessible to a wider audience. The dedicated website allows people to choose and rent clothes from the collections. This initiative not only contributes to waste reduction but also makes it possible to wear high-end garments that may not be accessible to everyone, especially younger generations. Furthermore, it highlights the Made in Italy label, showcasing the craftsmanship and quality of Italian products. In the same way, Selfridges in partnership with HURR has launched RESelfridges, a similar initiative, which allows the rental of high-end brands at affordable prices. (fig. 03) Through the special section, Selfridges is committed to making high-quality clothing

at disposal of a wider audience, thus reducing consumption and promoting sustainability in the fashion industry.

Renting shopping offers the opportunity to access high-quality, fashionable clothing without the hefty price tag associated with purchasing such items outright. By renting, people can indulge in luxury fashion experiences for special occasions or everyday wear without the burden of long-term ownership costs. This economic aspect of renting shopping appeals to a wide range of consumers, from those seeking occasional splurges to budget-conscious individuals looking to maximize their wardrobe options without breaking the bank. By renting garments instead of buying them outright, consumers contribute to the reduction of fashion waste, the extension of product lifetime and the conservation of resources. This shift towards a more sustainable and economically savvy approach to fashion consumption reflects changing consumer attitudes towards ownership and the recognition of the environmental impacts associated with fast fashion and overconsumption.

THE REDISCOVERY OF CRAFTSMANSHIP

The strong inclination of new generations towards self-identification and their need to express social values and uniqueness through their clothes, often results in searching and buying products as distinctive as possible.

For this reason, craftsmanship in small businesses is becoming really popular among the new generations. In fact, these brands offer products perceived as highly unique because of their handmade production, but also for their great possibility of customization.

If customization services offer the possibility of having a one-off product with endless personal variations of the same product (Wang et al., 2021), a handmade customization enhances the uniqueness of it, creating a one-of-a-kind product with high emotional value.

Through social media, such as Instagram and TikTok, several handmade brands are promoting their work, emphasizing their craftsmanship values and an exclusive shopping experience, principally user centered.

An example of this trend is the Italian brand Melidé Factory that, founded in 2014, went viral thanks to the virtual community in Instagram for its artisan-embroidered basic t-shirts. The brand offers a sustainable and high-quality collection

of basic clothing that users can personalize with handmade custom embroidery. However, the brand's embroideries are not the 'classic ones'. The brand has introduced ironic garments, based on a linguistic code typical of the virtual community of reference, which could be also additionally customized by the user. Unlike the traditional customized claim t-shirts, the graphics have not been created using a screen printing technique, but have been meticulously hand-embroidered by Italian artisans. The brand's products have gained so much popularity within the social community that they have driven a rejuvenation of the perception of the embroidery technique, encouraging the birth of new brands, and influencing also the fashion industry proposals.

On the other hand, if these kinds of brands are promoting a more ethical and sustainable consumption, they are not discouraging an over fashion consumption, as others are trying to do, like the one founded by the London based designer and artisan Helen Kirkum.

Through the Bespoke service, the Helen Kirkum Studio proposes an extension of the life cycle of the user's sneakers, creating a unique handmade



Fig. 03

product, starting from the old shoes. The owners are urged in this sense not to throw out their used, worn and loved sneakers, but to use this new service that, after careful personalized consultancy, will create new pairs of sneakers totally custom and unique in the world, enriched with great emotional values. This trend highlights the importance of the sense of uniqueness of the users in this new consuming scenario.

Service design in this context is essential to create relationships that are increasingly innovative, sustainable, but also highly involving and emotional, able to suggest to the virtual communities new more sustainable ways of consumptions.

FUTURE DESIGN DIRECTIONS

Faced with this radical change in consumer values and preferences, fashion brands are reviewing their communication strategies and improving their offers. According to the new trends of sustainable consumption, transparency, corporate social responsibility and engagement on environmental issues are becoming key elements in the fashion market. In this scenario the design and in particular the service design, as shown, is proving its importance and strength in designing relationships, connections, processes, and experiences acting as a facilitator of a value process.

The described trends of second-hand shopping, sharing fashion, and rediscovery of the craftsmanship showed how easily service design could act and be involved in the green revolution of the fashion field. Platforms for reselling or renting clothes and accessories like Vinted or HURR are concrete examples of how service design can promote the circular economy and collaborative consumption, as well as the improvement of the perceived value of a product and the consumption experience, could allow to lengthen its life cycle. Also, all these design strategies demonstrate how shopping experience and its narration within the virtual community are a key factor of contemporary fashion consumption, both for online and physical retail, especially by the digital native generations. Such actions, in addition to fostering the creation of positive and meaningful experiences for public audiences, contribute to the establishment of 'green communities', in line with the new generations values and increasingly oriented towards a more responsible and sustainable consumption awareness.

Moreover, regarding the fashion consumption landscape, it is essential to take into high consideration also the new virtual communities, such as those that are developing in online videogames and in the metaverse, as they represent a fertile ground for service designers, still poorly explored. In these virtual communities, users can create and express themselves using one or multiple avatars, 'virtual identities' that can be easily personalized through skins. According to this, increasingly, brands, such as Louis Vuitton, Gucci, Moncler, Vivienne Westwood, but also those of mass market as H&M, are developing and selling limited editions of virtual digital fashion products to be used as digital avatar skins, thereby promoting a new practice of fashion consumption.

This new and future 'phygital' scenario represents a strategic landscape through which service design could promote more sustainable fashion consumption practices. By developing innovative design products that follow current trends and languages, and keeping in mind the contemporary environmental emergency, it can also propose sustainable solutions for a greener and more ethical future, not limiting the desire of new generations to differentiate and communicate through clothing language but proposing a more sustainable and affordable alternative within everyone's reach.

CAPTIONS

[Fig. 01] Thrifting Virtual Community's contents on TikTok.

The picture highlights the insights of the most liked contents.

[Fig. 02] Levi's SecondHand platform. Explanation of how the Levi's service work

[Fig. 03] Detail of a bag rental price in the pop-up store ReSelfridges, in collaboration with HURR. Selfridges Mall London, March 2024

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