Exploring Macan Studio: Upcycling as a Sustainable Solution to Textile Waste

Ezra Nathalie Christine
enathalie01@student.ciputra.ac.id
Visual Communication Design, School of Creative Industry
Universitas Ciputra Surabaya

ABSTRACT

This research aims to provide fashion business owners with insights into the role of upcycling practices in building a sustainable brand. Upcycling offers a way to transform second-hand materials into unique, high-quality products, which can help reduce textile waste and appeal to environmentally conscious consumers. This study uses qualitative research methods, including case studies, interviews, literature reviews, and observations. Macan Studio serves as a key example, producing around 30 upcycled pieces each month, with 70% of materials sourced from second-hand items. Despite challenges in educating consumers about the value of upcycled fashion, especially in markets where second-hand is often associated with low cost, Macan Studio leverages social media and word-of-mouth marketing to build its brand presence. Engaging studio tours encourage customers to share their experiences online, while satisfied clients often spread positive feedback, further amplifying brand reach. Upcycling is shown to be not only eco-friendly but also a viable business strategy in the fashion industry. Through creativity and innovation, businesses can contribute to a more sustainable future while meeting the demands of modern consumers.

Keywords: Upcycling, Fast Fashion, Sustainability, Textile Waste

ABSTRAK

Penelitian ini bertujuan untuk memberikan pemahaman kepada para pemilik usaha di industri fashion tentang pentingnya upcycling dalam mengurangi limbah tekstil. Dengan menggunakan metode penelitian kualitatif melalui analisis dokumen, studi kasus, wawancara, dan observasi, studi ini menyoroti praktik Macan Studio dalam menciptakan pakaian dari bahan daur ulang. Studio ini memproduksi sekitar 30 potong pakaian setiap bulan, dengan 70% bahan berasal dari sumber bekas dan 30% dari bahan baru. Media sosial berperan besar dalam menyebarkan informasi tentang kreasi upcycling mereka, terutama melalui tur studio dan postingan rutin.

Selain itu, penelitian sebelumnya menunjukkan bahwa kepuasan pelanggan berkontribusi pada niat untuk berbagi dari mulut ke mulut yang positif. Pengunjung yang puas sering kali membagikan pengalaman mereka secara online*, yang menghasilkan pemasaran organik. Pendekatan ini diharapkan dapat memberikan wawasan tentang bagaimana upcycling dapat mendukung keberlanjutan dan membantu pertumbuhan bisnis* fashion *yang ramah lingkungan.*

Kata Kunci: Daur Ulang, Fast Fashion*, Keberlanjutan, Limbah Tekstil*

INTRODUCTION

Clothing is one of the essential human needs, along with food and shelter. It's something people continuously seek, as it plays a crucial role in ensuring decency, comfort, and protection in daily life (Djami et al.,2022). However, over time, clothing has evolved into a part of lifestyle with deep social meaning as it serves as a way for individuals to express their identity and indicate social status (Azarah et al., 2024). In recent years, microtrends; trends that rise to popularity quickly but fade just as fast; have become a major driver of this change; they often spread through user-generated content (UGC) on social media platforms like TikTok and Instagram, where Millennials aged 25 to 35 turn to peer reviews and influencer recommendations before making purchases. Moreover, price is also a key factor influencing consumers' purchasing decisions (Effendi et al., 2020), adding another layer to how trends and social media shape fashion choices.

Fast fashion is a clothing supply chain model designed to quickly adapt to the latest styles by frequently changing the products available in stores (Centobelli, et al., 2022). Unlike the global fashion industry, which traditionally focuses on two main seasons, spring/summer and autumn/winter, fast fashion brands release up to 52 collections a year, launching new styles weekly to meet consumer demand (Diantari, 2021). These brands are popular because they can produce trendy clothing in large quantities at low prices. However, this rapid production often harms the environment, creating significant textile waste. The fashion industry's activities impact water, air, and soil, consuming large amounts of materials, energy, water, and chemicals. These effects are especially severe in regions where

cotton is grown, polyester is made, and fabrics are treated, but they also impact places where the clothes are worn and discarded (Niinimäki et al., 2020).

The growth of fast fashion and constantly changing trends has caused a big increase in textile waste, which harms the environment. To tackle this issue, it's important to understand how fast fashion leads to more waste and explore solutions like upcycling clothes. These methods can help lessen the fashion industry's environmental impact by reusing existing materials. However, both consumers and brands face challenges and opportunities when trying to adopt upcycling, like the need for better awareness and education, as well as the chance to be creative and produce unique, eco-friendly fashion.

Macan Studio is a creative space that brings together designers, artists, and musicians to be part of the artistic process. Their primary focus is on upcycling old clothing through various techniques such as sewing and collage. The studio is deeply committed to promoting environmental sustainability and operates within a business ethos that prioritises respect for nature while firmly rejecting excessive consumerism.

The studio embodies the rebellious spirit of street fashion as a direct response to the fast fashion industry. This innovative approach led to the creation of "Future Loundry", which showcases clothing that is not just stylish but also carries important messages and critiques of current fashion practices. They offer an alternative to conventional fashion, allowing designers to effectively express the concerns and aspirations of today's youth (Adnyana et al., 2024).

This study uses Macan Studio as a case study to explore how upcycling clothing can address textile waste in the fashion industry. It examines how upcycling clothes can help reduce waste and conserve resources. Additionally, the study seeks to identify ways to encourage both consumers and brands to embrace upcycling while also addressing the challenges and benefits associated with these processes. By focusing on Macan Studio's innovative approach, this research highlights the potential for upcycling to create a more sustainable fashion industry.

RESEARCH METHOD

A research method is a way to collect and analyses information, helping researchers answer specific questions and gain a deeper understanding of a topic. In this study, a qualitative research method is used. Qualitative research focuses on understanding the nature and qualities of different phenomena, their context, and the various perspectives from which they can be viewed. Unlike quantitative research, which deals with numbers, qualitative research works with data in the form of words. Common methods used in this type of research include document study, observations, semi-structured interviews, and focus groups.

Building on this approach, the current study uses document analysis, case studies, interviews, and observations. Document analysis involves reviewing information from academic journals and reports about the fashion industry's impact on the environment and how practices like upcycling can help. A case study is conducted through an interview with Macan Studio, providing direct insights into the challenges and benefits of upcycling clothes. Additionally, observations are made to see how upcycling practices work in real-life situations, like workshops or studios where the upcycling happens. These observations help us to understand the daily processes involved in transforming discarded materials into stylish, upcycled fashion pieces. This combined approach aims to provide a clearer understanding of how upcycling can reduce textile waste and promote sustainability in the fashion industry.

RESULT AND DISCUSSION

Textile Waste

The fashion industry has become a major contributor to environmental pollution, as identified by the United Nations. It is the second-largest polluting industry in the world, responsible for 8% of global carbon emissions and 20% of all wastewaters. It produces more carbon emissions than international flights and shipping combined and consumes about 93 billion cubic metres of water each year. These impacts are driven by a growing global population and the rise of fast

fashion, which has led to an increase in textile production and consumption. This is due to the growing world population and the rise of fast fashion, which has led to more textile production and consumption. From 1950 to 2008, the amount of fibre each person used nearly tripled, going from 3.7 kg to 10.4 kg. Between 2007 and 2014, textile production grew by another 20.2 million tons, reaching 90.8 million tons. This growth is expected to continue, increasing by about 3.7% each year. As a result, the amount of textile waste has gone up a lot, with the industry creating 92 million tons of waste in 2015, and this is expected to grow by another 56 million tons by 2030 (Bailey et al., 2022).

Focusing unique designs and innovation can significantly help address challenges in the fashion industry. When brands create one-of-a-kind pieces, they reduce the chances of overproduction and waste because consumers are less likely to buy many identical items. Creative and innovative designs often result in timeless pieces that people want to keep for a long time. Instead of following fast fashion trends that change quickly, shoppers might prefer to invest in unique clothing that stands out and lasts longer. This approach aligns with the idea of upcycling, where old products are given more value rather than being downgraded. Harper (2017), as cited in (Langella, 2022), explained that by combining unique designs with sustainable practices like upcycling, the fashion industry can reduce its environmental impact while still appealing to consumers. This approach not only minimises waste but also encourages the creation of high-quality, lasting fashion pieces.

Sustainable Fashion

Henninger et al. (2009) and Kulsum (2020), as cited in (Sayyida et al., 2021), describe sustainable fashion as an approach that prioritises the environment and human welfare. The goal is to bring designers, producers, distributors, and consumers together to work towards making fashion more sustainable, focusing on improving the entire process from production to consumption. Here are a few techniques used in sustainable fashion:

1. Upcycling

   Upcycling is the process of turning used or leftover materials into new products that are more valuable or of better quality. This method helps reduce waste by creatively repurposing items that would typically be thrown away, giving them a second chance instead of ending up in landfills. For example, old jeans can be turned into bags. According to Pithers (2020) in (Tanzil, 2023). Even though there is still some bias against second-hand products, many consumers are increasingly appreciating upcycled fashion for its distinctiveness and worth.

2. Recycling

   Khandual et al. (2019), as cited in (Tanzil, 2023) define recycling as the process of collecting and processing used materials to create new products. This involves transforming waste through methods like mechanical or chemical processes. For example, plastic waste can be changed into synthetic fibres, and old clothes can be turned into new fibres and threads to make fresh items. This practice helps reduce waste and conserves resources by reusing materials instead of discarding them.

3. Reconstruction

   Khandual et al. (2019), as cited in (Tanzil, 2023), explain that reconstruction is a form of upcycling where old or leftover fashion items are taken apart and turned into new, unique designs. These pieces are often made in small quantities. Like upcycling, reconstruction can also include services that create new fashion products using second-hand materials from consumers.

4. Zero Waste

   Khandual et al. (2019), as cited in (Tanzil, 2023), describe the zero-waste design technique as a method that aims to reduce or eliminate waste in fashion production. It involves using techniques like pattern cutting, draping, weaving, and patchwork to incorporate leftover fabric into new designs, turning scraps into creative details or accessories. For example, designers might use fabric off-cuts to create unique patchwork designs on jackets or add small accents to accessories like bags and hats. This approach

helps ensure that as little material as possible ends up as waste during the manufacturing process.

Macan Studio

Macan Studio or Future Loundry is an upcycling fashion brand in Bali that was founded in 2018 by Ican Harem. The primary motivation that drove Ican to create this brand were to create performance wear, as he is a musician (part of Gabber Modus Operandi) and needed unique clothes for everyday self-expression. The brand started with illustrations, with Ican teaming up with a friend who painted on clothes like denim jackets. As the brand grew and Ican meet his wife, Manda Pingkygurl, a fashion designer, he got more into designing and upcycling clothes. This led to more creative and unique designs. Ican's frustration with the sameness of market designs and his desire for self-expression were the main reasons behind starting the brand.

Since then, Macan Studio has upcycled over 1,000 pieces of textile waste, aiming to reach up to 1 ton of upcycled materials each year. They source materials from second-hand clothing, buying them in bulk bags, including items people no longer want. Sometimes, they also use new items, like bootleg band T-shirts, as base materials. They don't just stick to clothing, they also use items like tapestries and carpets, turning them into unique pieces like jackets. On average, they can finish one upcycled piece a day. However, quality is a priority, if a design doesn't turn out right, they will keep refining it or repurpose it into something else until it meets their standards.

Figure 1. A tapestry that Macan Studio upcycled into a jacket
Source: future_loundry on Instagram

Teaching people the value of upcycled clothing has been tough for Macan Studio, especially in Indonesia, where many expect low prices. People often assume that upcycled products should be cheap since the materials are second-hand, mistaking upcycling for thrifting. "Thrift" means saving money, referring to the act of reducing the amount of money a person spends, which leads to the conclusion that it signifies financial savings (Fadila et al.,2023). They also tend to see sewing and crafting as simple, ignoring the creative effort, planning, and skill that goes into each piece. This misunderstanding makes it hard to show the real value of their work, even when the final product is unique and completely different from the original materials.

Macan Studio produces around 30 upcycled pieces each month, with 70% of materials coming from second-hand sources and 30% from new ones. They adjust their material needs based on regular production and market demand. Social media plays a big role in spreading the word about their upcycled creations. Amoako (2022), as cited in (Sutriani et al.,2024), mentioned that research has shown that satisfied customers are more likely to spread positive word of mouth and recommend products to others. They offer studio tours where visitors can try on clothes and enjoy playing dress-up in their display room. Many visitors share their experiences online, tagging Future Loundry, which helps generate more attention and engagement as organic marketing.

Figure 2. Display room in Macan Studio
Source: Writer's documentation

Even though finding good-quality second-hand materials can be challenging, they continue to expand their network to keep a steady supply, allowing them to create new, sustainable fashion.

The Future of Sustainable Fashion

Tanzil (2023) notes that growing environmental awareness, especially among younger generations, has led to a shift from fast fashion toward more ethical and sustainable options. This shift has resulted in increased demand for sustainable fashion, with 46% of fast fashion brands seeing a drop in sales since. According to a survey of global Vogue readers, sustainability is an important factor when purchasing new fashion items, and many consumers prioritise buying sustainable products whenever possible. Men aged 25 to 44 tend to buy only from sustainable fashion brands, including those offering second-hand or recycled products, while 73% of millennials are willing to pay more for sustainable brands. Generation Z, on the other hand, is more focused on changing their consumption habits, with 75% reporting that they buy second-hand fashion to reduce their environmental impact.

Figure 3. Sustainable fashion industry statistics 2022
Source: Research & Markets, Harvard Business Review, IISD, Global Fashion Agenda
(2022)

A 2020 survey by the World Economic Forum, involving 21,000 people from 28
countries, found that 86% of consumers want more sustainable and fair products
after the pandemic. WGSN's analysis shows that sustainability is still a top concern
for consumers, with the topic staying popular on social media across different
industries. A report from the IBM Institute for Business Value in 2020 also found
that 6 in 10 consumers are willing to change their buying habits to reduce their
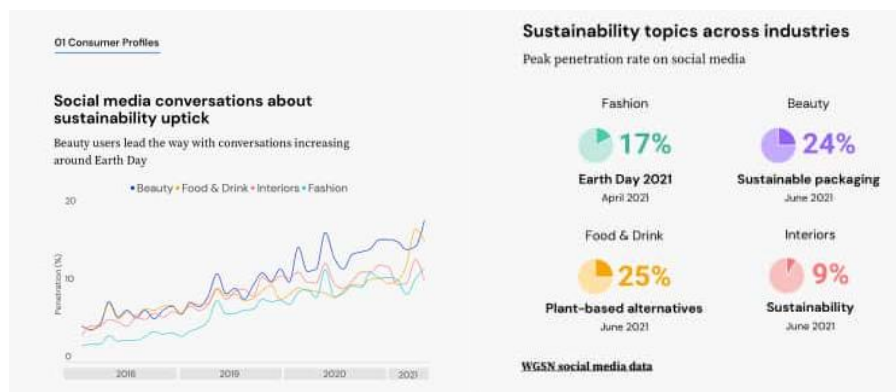impact on the environment.

Figure 4. Social media data for Sustainability topics
Source: WGSN White Paper (2022)

Ican Harem shared insights that support the promising future towards sustainable fashion. He highlighted that upcycling clothes helps reduce textile waste, making it a good option for sustainable fashion businesses. Upcycled items are unique and original, which attract customers who value individuality and eco-friendly fashion. Even though it has taken about eight years for him to teach people about upcycling and sustainability, interest is growing, especially with social media helping to spread the word.

This interest is turning into a trend, with more people seeking ethical and eco-friendly choices. As customers become aware of how traditional fashion harms the environment, they look for brands that take these issues seriously. Brands that focus on sustainability appeal to those who care about the planet and those who want high-quality, unique, and long-lasting items. This shift in preferences is helping the market with sustainable fashion growth and encouraging more brands to follow these practices. As more people choose sustainable options, it creates a cycle that attracts even more interest and customers over time, turning sustainability into a significant trend in fashion.

Ican believes that industry can do even more by giving unsellable products to small local businesses (UMKM) or providing materials to artists for upcycling. This helps reduce waste and encourages creativity and local collaboration. As sustainability becomes more popular, the demand for eco-friendly fashion is likely to keep growing, shaping a brighter future for the fashion industry.

CONCLUSION

The fashion industry faces a major challenge in balancing the demand for trendy, affordable clothing with the need to reduce environmental impact. Brands like Macan Studio, also known as Future Loundry, demonstrate how creativity can transform textile waste into unique, high-value items. By emphasising quality, storytelling, and educating customers about the value of upcycled fashion, Macan Studio has made a name for itself in the sustainable fashion market, proving that upcycling can be both eco-friendly and commercially successful. As consumers

become more aware of the environmental damage from traditional fashion, they increasingly seek brands that align with their values, offering an opportunity for sustainable fashion to grow, especially among younger, eco-conscious buyers. Adopting practices like upcycling, zero waste, and creating unique, durable designs can help the fashion industry move toward a greener future. Additionally, supporting local businesses and fostering creative partnerships can further reduce textile waste and contribute to a more responsible, eco-friendly fashion industry.

REFERENCES

Adnyana, I. K. A., Mudana, I. W., & Raharjo, A. (2024). Streetwear Style Macan Studio Dalam Fotografi Fashion. *Retina Jurnal Fotografi*, 4(1), 54-64.

Azarah, A., Harpy, M., & Agustina, R. D. (2024). Budaya konsumsi Budaya Konsumsi Baju Lebaran Sebagai Bentuk Sosial Gaya Hidup Konsumtif Pada Desa Jubung Kecamatan Sukorambi Kabupaten Jember: Budaya Konsumsi Baju Lebaran. *Aksiologi: Jurnal Pendidikan Dan Ilmu Sosial*, 5(1).

Bailey, K., Basu, A., & Sharma, S. (2022). The environmental impacts of fast fashion on water quality: a systematic review. *Water*, 14(7), 1073.

Centobelli, P., Abbate, S., Nadeem, S. P., & Garza-Reyes, J. A. (2022). Slowing the fast fashion industry: An all-round perspective. *Current Opinion in Green and Sustainable Chemistry*, 38, 100684.

Diantari, N. K. Y. (2021). Trend Cycle Analysis on Fast Fashion Products. *Journal of Aesthetics, Design, and Art Management*, 1(1), 24-33.

Djami, R. M., Sauw, H. M., & Tino, M. M. (2022). Analisis Faktor-faktor Pendorong Pembelian Baju Bekas "Rombengan" Melalui Media Sosial (Facebook) di Kota. *Journal Pendidikan Ilmu Pengetahuan Sosial*, 14(2), 293-297.

Effendi, R. A., & Anggrianto, C. (2020). Analisis Pengaruh Brand Dan Promosi Pada Sosial Media Terhadap Keputusan Pembelian Tiramisu Baileys Di Surabaya. *Industri Kreatif*, 2, 212-220.

Fadila, N. N., Alifah, R., & Faristiana, A. R. (2023). Fenomena Thrifting Yang Populer Dikalangan Mahasiswa. *Lencana: Jurnal Inovasi Ilmu Pendidikan*, 1(3), 278-291.

Langella, C. (2022). More design, less waste: Upcycling, bioinspiration and design-based entrepreneurship. *Base Diseño e Innovación*, 7(7), 26-41.

Niinimäki, K., & Durrani, M. (2020). Repairing fashion cultures: from disposable to repairable. *Responsible Consumption And Production*, 153.

Qayyum, Y., Wattar, O., & Aljalab, F. (2024). Swipe to buy?: Examining the influence of Instagram and TikTok on millennials fast fashion purchases.

Sayyida, S. Q., & Wardaya, M. (2022). Sustainable Fashion, Investasi pada Produk Fashion yang Berkualitas untuk Mengurangi Limbah Fashion yang Menumpuk.

Sutriani, S., Muslim, M., & Ramli, A. H. (2024). The Influence Of Experience, Satisfaction And Service Quality On Word Of Mouth Intentions And Customer Loyalty. *Jurnal Ilmiah Manajemen Kesatuan*, 12(4), 1037-1052.

Tahalele, Y. K. S., Tanzil, M. Y., Tjandrawibawa, P., Indriati, L., Indrawan, S. E., & Toreh, F. R. (2023). Sustainable Fashionpreneur: Strategic Waste Management for Lifestyle Product.