

The Effectiveness of Zara's Join Life Program to Minimize Textile Waste

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ABSTRACT (10 PT)

The fast fashion industry has been rapidly increasing in both popularity and production yearly, especially with numerous new fashion trends inspired from the media. With the consumer behavior of buying clothing items based on the trend, a shorter product life cycle is implemented and causes the environment to be catastrophic. The fashion industry itself has polluted waterways with toxic dyes and microplastic fibers and textile waste have polluted landfills; in addition, carbon emissions and greenhouse gas emissions are largely produced during the production process until arriving into customer's wardrobes. This contributes to the worsening of global warming and climate change, an issue that is concerned for the earth's future and the living lifestyle of the population. Hence, customers are more environmentally aware and support businesses that are labeled as eco-friendly in this era. With that, fashion businesses have been transforming into a 'green' business to compete in the market. Zara is one of the examples as they launched the Join Life program, a program that reduces environmental damage in their production process and raw materials by using fabrics and technologies that are safer. Previous research still lacks in recognizing Zara's Join Life as an environmental protection program and its effectiveness. Therefore, the case of Zara's Join Life's effectiveness to minimize textile waste and benefit the environment will be further investigated and studied as it helps people to give more support and contribution to this program, especially with the growing market of fast fashion.

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Introduction

According to Lai (2021), fast fashion is a large sector of the fashion industry that focuses on the quick and inexpensive production of low-quality apparel, which is displayed and sold in an instant through retailers to meet the current fashion trends. The fast fashion industry started widely during the industrial revolution era; the usage of machines to produce clothing is the reason for faster and cheaper production. Due to this, fast fashion brands, such as Zara, H&M, Uniqlo, and Bershka, can sell their products at lower prices. Consumer behavior is most likely to buy new clothes that fit in recent fashion trends due to affordable prices when compared to slow fashion [6]. However, this production activity will cause damage to the environment by polluting oceans with wastewater, toxic dyes, and plastic fibers [28]. According to Ro (2020), “the fashion industry accounts for nearly up to 10% of global carbon emissions, more than the aviation and shipping sectors combined, and nearly 20% of global wastewater”. In addition, with the current consumption pattern, fast fashion items are only worn seven to ten times before it is thrown out [10]. As a result, this will undoubtedly produce textile waste. In fact, 87% of fashion pieces end up in landfills [16].

Environmental protection is essential to solve textile waste and protect the environment from the harm caused by fast fashion. There are a few ways to minimize textile waste, like thrifting. Thrifting is an activity that is commonly done when a person buys or hunts used goods, or in this case clothing, that is in wearable condition [19]. Recently, purchasing second-hand fashion items has become a trend in society, especially for young people; it is projected that second hand stores’ growth is eight times faster than other apparel markets [17]. Some fashion brands have started to provide ways to decrease their textile waste production; Zara is one of them. Zara has an eco-friendly approach to clothing production called Join Life. Join Life is a long-run sustainability program for customers to buy fashion items from the brand that are produced and processed using technologies and raw materials that are environmentally friendly [30]. The intention of the project is to improve Zara’s clothes to be more sustainable, making positive impacts on the environment and help with the reduction of textile debris.

The issue of textile waste due to the overconsumption of fast fashion has been discussed in several research pieces, mostly about the circular economy. The circular economy is defined as the cycle of products or services repeated by material reduction, redesigning, reusing materials, and ensuring less resource intensive [29]. Currently, “post-consumer textile waste has grown in importance in the clothing industry as it increases the frequency of purchase, the poor quality of clothing, and the reduction in price levels”, which reinforces the importance of applying circular economy to this issue [23]. Based on the study from Rotimi et al. (2021), sustainability practices are heavily applied as a solution to manage post-consumer textile waste when it reaches the end of the life cycle. In addition, Jia et al. 's (2020) journal discussed how the circular economy had been applied to decrease the disposal of textile and apparel wear to solve ecological issues.

All the previous researches share a common explanation of the impact of a circular economy and decreasing textile waste is applied as a sustainability practice to improve the environment. Although the mention of pre-owned clothing programs as a solution to improve the environment’s condition is commonly found, it was generalized. There were no specific brands or programs that were mentioned as an example or to be analyzed in terms of their

effectiveness and impact. Hence, Zara's Join Life has not proven whether they are effective and impactful towards the environment.

The aim of this study was to determine whether Zara's Join Life program was effective and impactful as the previous research would state about minimizing textile waste programs. According to our hypothesis, Zara's Join Life programs do help minimize pollution from the textile excesses such as plastic fibers, but not at the same level as their waste generation; it is moderately effective.

Method

The research approaches that were taken to answer the research question are through paper review and secondary research. A paper review was done as a part of further discussing Zara's actual commitment to improving the environment's condition. The authors provided statistical data as well. The numbers that are in the journals can be compared, analyzed, and interpreted. Several papers were reviewed to create a concrete knowledge or base that could further explain the methods that Zara has implemented, especially with the research specifically reviewing Zara's corporate social responsibility and their transition to becoming 'slow fashion' [8]. The sustainable program was also surveyed from each paper to another in order to create multiple perspectives that can help to reach an answer to the research question and a conclusion for this study.

To further add a list of information and data, this paper will take them from trustable sources, like new articles and journals, in order to issue Zara's environmental protection program and its contribution to lower carbon emissions, wastewater pollution, and microfiber debris. This method was implemented to have easier access and convenience for data and information gathering to help analyze the worth of Zara's program towards the environment. The data became a guide to analyze their effectiveness and attain the truth about the company's corporate social responsibility.

Additional methods of research are through videos or documentaries that were documented and specified on fast fashion and Zara's usage of textiles and materials for their garments [7]. This will give more insight into Zara's operation by identifying the materials used as it will determine whether they have truly led the change in the fashion industry. It can add

another point of view from experts that have observed and researched their tactics and way of operation.

Result and Discussion

A. Results

Table 1: Findings from Journals Regarding Zara and their Sustainable Business Practices

Title	Findings
Sustainability and Transparency—Necessary Conditions for the Transition from Fast to Slow Fashion: Zara Join Life Collection’s Analysis [8]	Zara’s Join Life program is advertised as a method to support the sustainability of their fashion pieces and help the environment.
Exponential Success Through Integrated Supply Chain Optimization, Emotional Intelligence, and Reputation-based Leadership: Zara Model [3]	Zara’s transition to becoming more eco-friendly as a way to be successful and create a good brand image; it is achieved by using eco-friendly fabrics, recycling, and using sustainable methods to grow and manufacture their clothing line.
How Consumers’ Response on CSR Affects Brand Competitiveness in the Fast Fashion Industry – Case Study of Zara (Inditex) and H&M [15]	Corporate social responsibility (CSR) is a factor of brand competitiveness. In the case of Zara and H&M, Zara has higher CSR due to their stylish design and

	quality, although H&M is moretransparent with its social responsibility.
<i>Sisi Gelap</i> Multinational Corporation (Mnc) Fast Fashion: <i>Implikasi Terhadap Keamanan Lingkungan</i> [2]	Multinational corporations, like Zara, do not fully live up to their eco-friendly programs, even though they have promoted and joined many environmental activities and campaigns.
Sorting Responsible Business Practices in FastFashion: A Case Study of Zara [13]	Most of Zara’s business practices are not as sustainable as it seems; fast fashion will remain an unsustainable business practice.

Table 2: Zara’s Sustainability Scorecard

SustainabilityFactors	A	B	C	D	F
	Great	Good	Mediocre	Insufficient	Fail
	100% Achieved	Over 50%, Sustainable	Under 50%, Sustainable	No Achievements, only plans	Cannot be Attained

The Products and Services				✓	
Production				✓	

System (Sustainable materials)					
Employee Quality				✓	
Supply Chains, Contracts (Purchasing criteria, reuse, recycling, upcycling)			✓		
Sustainability Reporting (transparency)					✓
Sustainability Management (Recognition)				✓	

n and Certification)					
UN SDG Alliance				✓	

Articles				✓	
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Source: [11]

Table 3: The Variety and Amount Used of Fabrics in Zara's Clothing Line

Type of Clothing	Types of Fabric Used (%)	
Women's Clothes	Viscose	55-100
	Recycled Polyester	30-65
	Recycled Polyamide	30
	EcoVero Viscose	50
	Tencel Lyocell	40
Men's Clothing	Recycled Polyester	20-25
	Ecologically Grown Cotton	50
	Recycled Cotton	20-25
	Polyester	4-63
	Elastane	1-5
	Elastomultiester	7
	Viscose	32-56
	Cotton	100

Girl's Clothing	Ecologically Grown Cotton	60
	Recycled Cotton	15
	Join Life Viscose	50
Boy's Clothing	Ecologically Grown Cotton	50
	Recycled Cotton	15-20
	Recycled Polyamide	45
	Recycled Polyester Filling	100

Source: [8]

Table 4: The Places of Production in Zara's Clothing Line

Type of Clothing	Place of Production (%)	
Women's Clothes	Morocco	50
	Turkey	30
	India	10
	China	10
Men's Clothing	Turkey	70
	Bangladesh	10
	Pakistan	10

	Egypt	10
Girl's Clothing	Morocco	30
	Turkey	30
	Pakistan	20
	China	10
	Portugal	10
Boy's Clothing	Morocco	40
	Turkey	10
	Portugal	10
	Bangladesh	40

Source: [8]

Table 5: The Eco-friendliness of Fabrics Zara Uses and their Reasons

Types of Fabrics	Environmental Friendly		Reason
	Yes	No	
Viscose		✓	Highly polluting process to breakdown; contains chemicals; non-biodegradable [25]

Recycled Polyester and Filling (includes Elastomultiester)	✓		Generates fewer carbon emissions and PET; fewer microplastics produced when washed [25]
Recycled Polyamide	✓		Diverts wastes in landfills and water pollution (due to microplastics); less water consumption [26]
EcoVero Viscose (Join Life Viscose)	✓		Biodegradable; uses 50% less water in production; cuts 50% of carbon emissions compared to viscose; has been awarded EU Ecolabel [4]
Tencel Lyocell	✓		Biodegradable and compostable; low ecological impact; reuses solvent and water in making-process [25]
Recycled Cotton	✓		Sheds fewer microfibers; low water and energy consumption; biodegradable; chemical controlled [25]
Ecologically Grown Cotton	✓		Reduces water consumption; reduces toxic chemicals used [5]

Polyester		✓	High energy consumption; non-biodegradable; harmful chemicals
			used; non-renewable; releases microfiberswhen washed [25]
Elastane		✓	Toxic chemicals used in production;non-biodegradable [24]
Cotton		✓	Harmful chemicals used; high waterconsumption; soil erosion

B. Discussion

1. Zara's Join Life Program Effectivity

The rebranding of the textile industry becoming “environmentally friendly” is a huge trend; it is also called “green fashion” [7]. Zara's Join Life is advertised as their method to reduce their waste to save the environment by using materials that are biodegradable, recyclable, reduces carbon emissions, and minimizes harmful waste [8]. Some researchers agree that Zara's transition into an “eco-friendly” brand is a successful way to create a highly reputable brand image and higher sales [3]. Especially that Zara's corporate social sustainability (CSR) is higher than H&M, another well-known fast fashion brand. However, their Join Life program is not as effective as it is projected to customers and has caused CSR scandals, along with issues regarding the types of fabric used and transport.

The issue of Join Life that was concerned by critics was the method of Zara's mass production. Zara's brand recognition plays a huge role as it shows that a reputable brand like them is stepping down to become environmentally friendly and sustainable. However, they are still a fast fashion company that releases 65.000 clothing yearly, 200 models per day, and replaces three-quarters of their apparels in stores monthly; while competitors replace them every four to five months [7]. With the amount of production, the clothing lifecycle would be shorter and is more harmful for the environment [9]. Because of the short life cycle, there would be a higher amount of disposal, creating more textile waste

that can harm the environment since some materials may not be biodegradable and pollute waterways and lands. Researchers agreed that scandals from Zara's Join Life programs are concerning, although their CSR is not budgeted [15].

Transparency about their environmental plans has also become an issue for Zara. In terms of CSR, Zara 'won' over H&M only due to their quality and fashionable apparels; when compared, H&M is more transparent in their CSR [15]. Many researchers have claimed that Zara does not publish their production process and raw materials; there is hardly any evidence of them succeeding in minimizing harmful chemicals and materials in their products and program effectiveness [2], [13]. It is further proven from table 1. Based on Zara's sustainability scorecard that was published in their Sustainability Report, most of their sustainable activities are labeled as insufficient (D); this includes their employment, products and services, production system and management, and supply chains [11]. Focusing on their transparency, the scorecard gives Zara an F, indicating a failure in being able to show their progress on lowering carbon emissions, chemical usage, and other environmental goals they have set. Without any clear evidence, it is difficult to say that Zara's Join Life program has succeeded in providing environmental protection. Overall, previous researchers have agreed Zara's transparency is hard to attain, causing difficulty in determining their environmental goals' and plans' effectiveness [2], [13], [27].

b) Materials Used in Zara's Join Life Clothing

There are quite a variety of fabrics that are used to produce Zara's apparel, which are shown in table 3. The data is collected based on the age and sex of customers (women, men, girls, and boys). As Join Life's purpose is to limit the harmful impact to the environment, the eco-friendliness of each material can be seen in table 5. From table 5, it can be said that 63.6% of the materials are environmentally safe as they are biodegradable, divert wastes in landfills and water pollution, and have lower energy and water consumption. The remaining 36.4% of the materials used are not environmentally friendly; some of the reasons being that the materials were non-biodegradable, polluting to breakdown, contains harmful chemicals, higher water and energy consumption, and causes soil erosion. From the percentages, it can be seen an effort has been made.

As a progressing program, it signifies some progress in transitioning into a more environmentally safe garment store. However, the percentages from table 3 contradicts. In women's and men's clothes, the most highly used fabric is viscose, polyester, and cotton. All of the materials mentioned are categorized as environmentally harmful, further reasons can be seen in table 5. Since Zara's target market is more towards women within the age range of 18 to 40, it is dangerous for the environment [1]. This is because women's clothing is much more desirable and consumed, which means the production of clothes using viscose will be increased. By doing so, it will cause wastewater pollution as harsh chemicals are used to make viscose; one of them

being carbon disulfide, which can be exposed through breathing and drinking water that contains it [7]. Meanwhile, in girl's and boy's clothing, ecologically grown cotton and recycled polyester filling are the highest. This does not concern much as the materials are considered as eco-friendly. In conclusion, in terms of materials, researchers have agreed

that Join Life's weakness is in their large use of synthetic and semi-synthetic fibers in the production process, but had inequivalent progress by using recyclable materials in a small percentage of their clothes [8].

c) Transport of Production for Zara's Join Life Clothing

Visible from table 4, Zara has outsourced their production from many countries; mostly from Turkey and Morocco. Because of the far locations, transporting would be an issue to the environment as it produces greenhouse gas (GHG) and carbon emissions. It was stated that transport "has the highest reliance on fossil fuels... and accounted for 37% of CO2 emissions...in 2021," which can cause air pollution and global warming [12]. If Zara had used more insource producers, the pollution from transport would decrease, creating a difference for the environment. Hence, although not fully disclosed, researchers have agreed that transportation hinders Zara's Join Life potential to become effective [8].

Conclusion

The environment's health has always been a serious issue, especially regarding pollution, GHG, and carbon emissions that affect global warming and climate change. With the focus on textile waste, nowadays, a lot of people are more environmentally aware and fashion brands are 'rebranding' their business into a 'green business' to compete within the market; Zara is one of the examples. They conducted a program called Join Life to support a sustainability initiative aimed to reduce the environmental impact, like harmful textile waste, of their clothing production by using more eco-friendly materials and environmentally safer production processes. By doing so, Zara wants customers to know that although they are a fast fashion brand, they are still environmentally aware. However, the Join Life program is as effective as it seems.

Based on the discussion, the Join Life program is not as effective as it was planned. Zara has a major issue in being fast fashion itself. With 200 clothing models per day being released and replacing most of their racks monthly, Zara's clothing life cycle is shortened and causes more disposal of products. It is concerned that Zara's mass production itself is creating a large textile waste in the fashion industry. In addition, Zara's production process and raw materials have not been published, causing them to not be transparent to customers and difficult to determine the program's effectiveness; it was further proven by the sustainability scorecard that their transparency was labeled as a failure (F). Although 63.6% of Zara's clothing is eco-friendly, non-biodegradable fabrics like viscose, polyester, and cotton, are still heavily used. That usage of fabrics damages the environment by releasing microplastics when washed, high water and energy consumption, and dangerous chemicals are being used. Transporting their product also has become an issue for the environment as Zara outsources their production, mostly from Morocco and Turkey. The air pollution that is released from the far travel of products releases carbon emissions and relies on fossil fuels; it contributes to the worsening of global warming and climate change.

In conclusion, Zara's Join Life program appears to be partially effective in reducing the environmental impact of their clothing production. Several measures can be taken to improve their 'green' business, such as being more transparent in the production process and raw materials; reducing the usage of viscose, polyester, and cotton; and insourcing their production to reduce the far transportation. If these changes are applied, Zara's Join Life program would be more effective to reduce the textile debris, pollution, and improve the environment.

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