

Role of Supply Chain Management in Fashion Industry: Retrospective-Prospective Study through the Context of Sustainability

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Abstract

Today, fashion brands are using sustainable cotton initiatives to reduce water, energy and chemical use, new dying technology to reduce water consumption by up to 50%, as well as numerous energy and chemical saving schemes throughout the supply chain. And along with the development of more socially and eco-conscious production and marketing practices, there is still room for the sustainable fashion movement to grow beyond its current scope (Ackroyd, Hughes, and Soothill 1989). With the support of growing information networks and brand transparency consumers will be better equipped than ever before. Now the fashion industry around the world generates more than a trillion dollars annually. It is a well-known fact that textile industry is one of the most polluted industries in the world. The future of fashion calls for sustainability. Currently, one can see a depressing situation in the textile industry as far as textile pollution is concerned. However, the future of fashion is not as bleak as it may seem. Currently, big clothing and footwear brands are showing the world, how fashion can be made sustainable and successful. The research methodology applied for this purpose is a critical literature review examining books and articles also and the current trends of the fashion. The findings demonstrate the rising importance of sustainability in fashion retail. In this regard, fashion retailers play a key role and responsibility for the sustainability in the fashion supply chain from the beginning to the end.

Key words: Sustainability, Pollution, Enormously, Clothing, Depressing, Bleak, Supply Chain, Textile, ethical, eco-conscious.

1. Introduction

Actress Emma Watson at the 2016 Met Gala made headlines (and best-dressed lists) in a sleek monochrome gown woven entirely from yarn made of recycled plastic bottles (Gregory S Kolt 2009). A platform designed by Calvin Klein in collaboration with Green Carpet Challenge that pairs high-profile designers with sustainability initiatives, the dress made a style statement and even more importantly, a sustainability one.

1.1 The industry is in the midst of an eco-renaissance

The fast fashion of its stunning environmental impact in particular becomes clear, designers (and even mainstream brands) are exploring how to create stylish designs from an array of sustainably sourced or recycled materials. It has been observed in Australia, The Great Beyond uses hardy, fast-growing bamboo to create soft, durable basics with impressive environmental benefits, while Canadian handbag designer Matt & Nat uses renewable materials like cork and rubber for their all-vegan products (Ajzen 1991).

During 2016, Adidas teamed up with Parley for the Oceans to create shoes made entirely of reclaimed and recycled yarns and filaments from ocean waste and deep-sea gillnets.

1.2 Sustainable Labels

But it's not just sustainable and recycled materials catching the eye of environmentally conscious designers. In recent years, a new form of up cycling has been making its debut on runways: food waste. From shoes and purses to evening gowns, designers from around the world are discovering ingenious ways to turn fruits, vegetables, and food byproducts into desirable apparel and accessories. Philippines-based Ananas Anam is turning pineapple leaf fibers into an environmentally friendly leather called Pinatex. The process uses by products of pineapple harvest itself, so it takes no additional land, water, pesticides, or fertilizer beyond what's already used to grow the pineapples in the first place. Compared to the energy-intensive leather industry, that's a big deal, and partner brands like Camper and Puma have already taken note.

1.3 In the battle against waste, fashion is putting itself on the front line

In Italy, award-winning startup Orange Fiber is hard at work transforming the 700,000 tons of annual waste created by Sicily's orange juice industry into silky, soft yarn. And in the UK, designer Rosalie McMillan is creating high-end jewelry with a clean aesthetic from materials derived from coffee grounds collected from London offices, which she dries, compresses, and controls into bold, geometric shapes.

1.2. Problem Statement

This study aims to identify the main perspectives of research on sustainable retailing in the fashion industry. The content analysis results indicate that the most prominent areas in the field are sustainable retailing in disposable fashion, fast fashion, slow fashion, green branding and eco-labeling; retailing of secondhand fashion; reverse logistics in fashion retailing; and emerging retailing opportunities in e-commerce. The results from this review also indicate that there is a lack of research on sustainable retailing in the fashion industry in the developing market.

1.3 Research Objectives

RO1. To create an overlapping, umbrella definition of what constitute sustainable fashion there needs to be a consistence message that establishes sustainable fashion as a socially conscious movement as well as deviation away from the exploitation of natural and human resources.

RO2. To establish a connection between consumers and informed purchasing decisions, it is also crucial to present the concept of sustainable consumption as a way of both supporting environmental sustainability as a whole as well as the subset of sustainable fashion (Jung et al.,2014).

RO3. To reduce the textile waste and environmental depletion while increasing ethical treatment of workers.

RO4. To slow down the global production and consumption process in order to form an industry that will

be more sustainable in the long run.

RO5. To make more ethical purchasing decisions and to potentially change the face of the current fashion industry.

RO6. To make the right choice in the methods of production and sales and what one prefers to wear, can enormously impact the society and the environment in a favorable way.

1.4 Research Questions

RQ₁: What exactly is sustainable fashion and what role does it play in the sustainability movement?

RQ₂: What are the main differences between mainstream, “fast fashion” and “sustainable fashion”?

RQ₃: What are the key benefits of sustainable fashion?

RQ₄: What are the facets of a sustainable fashion industry company from a corporate standpoint?

RQ₅: What marketing techniques to companies use to attract new customers?

RQ₆: Is there a connection between consumers who subscribe to environmental activism and those who support and purchase sustainable fashion?

2. Literature Review

2.1 Fast Fashion goes greener with new unconventional textiles

The rapid production system that promises quick turnaround of trends and low prices, with a supply chain that snakes through some of the lowest wage economies on Earth as this is the epoch of 'Fast fashion.' Not only the Fast fashion brands dominate in the high streets, but also our wardrobes and represent the three trillion-dollar global fashion industry's greatest success story. But at what cost? The environmental footprint of today's fashion industry is extraordinary, making it one of the top five most polluting industries on earth, alongside the petrochemical industry (Valliappan Raju, Poh Phung, and Kalimuthu 2019).

Approximately, it can take, 2650 liters of water to make a single cotton t-shirt, and the global textile industry produces an astounding 1.2 billion tones greenhouse gas emissions per year. On the other end of the product life-cycle, North Americans send 9.5 million tons of clothes to landfill annually and major portion of which could have been reused or recycled, and some of which is still unworn. In the event of these staggering statistics, it's no wonder that the reduction of the industry's carbon footprint and improving sustainability have become top priorities for textile manufacturers and brands alike in recent years. Eventually, it is material innovations (such as leather made from pineapple leaf fiber and sugarcane-derived (EVA foam soles) pursued alongside a commitment to technologies that enable closed-loop system, that will pave the way forward for a greener fashion future.

Beyond recycled plastics, thinking of the millions of tons of clothes and fabrics that are sent to landfill

each year, companies are also investing in new techniques for recycling and reusing leftover and post-consumer textiles. A joint venture from Spain's Tejidos Royo textile company and Austria's Lenzing group, REFIBRA combines cotton scraps and wood pulp into new TENCEL Lyocell fibers and has produced textiles for international labels such as Reformation, Levi's and DL 1961. Re.VerSo, a platform based in Italy, provides brands including Balenciaga, Gucci and Stella McCartney with wool and yarns that have been reengineered from European, textile waste (Mohd Adnan and Valliappan 2019). And Swedish outdoors label Fjallraven recycles Italian wool scraps into new Re-wool garments and accessories, which takes less energy and fewer resources to produce than those made with virgin wool.

"Textiles made from regenerated fibers need to be used more widely as they become more scalable. This is one of the significant ways the industry is looking to build circularity into fashion," says Kozlowski. "We need to make use of all the resources embodied in current garments – loncell-F, Evrnu, re:newcell are all looking to address this challenge." These startups are experimenting with innovative, technology-enabled ways to recycle old garments and textile scraps, even those made out of fabric blends, into strong fibers for new products. And although not all of the technology is scalable or commercially viable yet, there are promising first steps.

The whole supply chain is waking up to the fact that this isn't just a fad or a trend, it's the direction that the industry has to move into, says Finck. "The big companies that can help make it real are working in lockstep and partnership with smaller companies to launch these new, innovative products." Whether the textile products of the future are made out of pineapple leaf, recycled marine plastics, Brazilian sugarcane or used t-shirts, two encouraging ideas can be glimpsed through these exciting innovations: with enough effort, fashion's enormous, unsustainable carbon footprint can be significantly reduced; and, within the next decade, we may all be able to exclusively wear clothes, made from non-virgin materials, that are either biodegradable or fully recyclable.

3. Research Methodology

The fundamental concept of sustainable fashion has garnered attention from academics, brands, and consumers, research is still tethered by limitations enforced by the rapid globalization and normalization of "fast fashion." In seeking to understand and enhance current research and also by conducting a thorough literature review, and to find out to find out gaps in the literature that need to be filled (Valiappan Raju 2019). Another element of the research revealed inadequacies in the study of corporate social practices.

There is currently limited research about the success of marketing strategies for sustainable fashion (Valliappan Raju and Phung 2020). To formulate the multifaceted approach that several studies suggest, including highlighting major selling points such as brand name, comfort, quality, low price etc., there needs to be observation of both completely ethical and sustainable fashion companies as well as those beginning to adopt a more transparent approach to their production and distribution practices.

4. Findings and Results

In the 21st century the green movement has got to be one of the most pervasive lifestyle trends. More

fashion designers are ‘going green’ (Leitereg) with its growing popularity which is also the new trend in fashion (Alkipsey, 2018). Natural and pure organic clothing is on the rise and is popular with many designers. Oscar de la Renta and Diane van Frustenberg are a few fashion designers that have included organic clothing in their collections. Most of the people and consumers want to help the environment and are thinking twice before buying items.

The Americans are now looking more closely at labels to see what is in the product. Globally with a more eco-conscious way of thinking, designers can benefit from that by making their clothing organic and many high fashion designers are doing it and even regular stores that you hear about everyday are also including organic clothing (Florence n.d. 2018). In reference with that three examples of these stores that offer organic clothing lines are Target, Eco Mall, and Soul-Flower.

As a matter of fact, fashion designers can expect a growth in profit by going green due to the demand right now for organic clothing and the conscious people will even pay more just to know that the materials are organic (Valliappan Raju 2018). It is obvious as the world grows more eco-friendly designers will benefit from going green. Designers has already started asking that, ‘How can I benefit from going green?’. Simply the easy answer is through using organic materials, drawing in new consumers and pure satisfaction about the good they are doing to the environment.

Now, the environmentally-friendly fabrics are easier to find than ever before and the designers have a must; it has to perform well and be stylish, and using organic materials have all of these qualities. Most of the designers do not take the time to find out about these materials (Valliappan Raju and Phung 2019). Natural, organic materials actually are more durable than any other product. Although it costs more to make these fabrics, consumers are willing to spend a little more just to know that it is made out of natural fibers.

5. Conclusion

2020, the year the fashion industry is going green

The concept of sustainability is high on the list of operational priorities for global brands and retailers, as their supply chains, manufacturing and sourcing are no longer acceptable to be vague, cloudy grey areas. Currently, fashion conscious customers are demanding to know where their goods are made, in what capacity they are produced and more importantly, what they made of. Now consumer demands greater insights into the products they buy many brands use a meager sustainability effort to loudly broadcast their green credentials in the media (Valliappan Raju, Poh Phung, and Kalimuthu 2019). It may be mentioned here that how often are we not told of a brand who has introduced a small percentage of organic fabric in a capsule collection, or a collaborative effort working with a local manufacturer?

As every step towards sustainability is a step in the ‘right’ direction, one cannot help the disingenuous boasts from retail behemoths for their ‘efforts’ while they continue to produce 95% of their clothes in cost saving markets using cheap labor in countries with little regard for the welfare of people, animals, or the impact of processes on the environment. It is clear that high street is already full of green options, like H & M conscious collections, though it is typical of these corporations to make sure the consumer is boldly

informed of all the good they are doing. And at the same time their footprint left on the environment by over-producing clothes the world doesn't need is a less addressed conversation. In fact, high street, lest not forget, has been the main driver of disposable fashion, yet the slowest to take on responsibility.

In order to achieve the results the movement desires, consumers must be faced with the realization that the non-transparent, fast fashion giants they actively subscribe to are not making a positive social or environmental impact. Along with the more educated consumers, companies must develop multi-faceted marketing approaches that go beyond keywords like “green ”or “eco-friendly” and entice customers towards their product quality, comfort, and brand name. Sustainable fashion could potentially change the way people consume and the way companies produce, with the correct balance of the two, an incredibly positive socially and environmentally beneficial effects would ensure.

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