



Sustainable Business Models in the Fashion Industry

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ABSTRACT

Through the prism of consumer awareness, attitudes, and purchasing behavior, this study investigates the current situation of sustainable business models in the fashion sector among consumers aged 18 to 25. Important sustainability elements like eco-friendly materials, ethical labor practices, transparency, and circular fashion models are examined using a quantitative approach with a 10-question multiple-choice questionnaire and secondary research support. The findings indicate that young consumers are very conscious of and have favorable opinions about sustainability; but, because of high prices, limited product availability, and ambiguity surrounding brand promises, real-world purchasing behavior is still low. There was a pronounced attitude–behavior divide, as statistical tests showed no significant correlation between willingness to pay for higher costs and attitude toward sustainability.

INTRODUCTION

The fashion industry's use of sustainable business models has progressively altered our perceptions of apparel, manufacturing, and consumption. They are both commercially feasible and address social and environmental responsibilities. The fashion industry has recently been under fire for its detrimental environmental implications, which include excessive waste, pollution, and labor abuse. As a result, more companies are implementing sustainable business strategies with the goal of having a good influence. These approaches are based on social justice, resource efficiency, and the circular economy. They aim to maximize product lifecycles while minimizing waste.

Brands can lessen their environmental impact by using eco-friendly materials like biodegradable textiles, recycled fibers, and organic cotton. Additionally, sustainable fashion promotes ethical production methods that guarantee people are paid fairly and have safe working conditions. Purchasing well-made, long-lasting clothing is encouraged by slow fashion, which lessens the desire to throw things away too soon. Clothing can be used for longer thanks to the growth of rental and resale services, which reduces the demand for new production and encourages reuse.

Although adopting sustainable practices may require a large initial investment, these business strategies have long-term advantages. By encouraging innovation and client loyalty, they lessen their negative effects on the environment, enhance social results, and make financial sense. The fashion industry may address pressing global issues and find new avenues for expansion and uniqueness in a cutthroat market by implementing sustainable business methods.



In addition to changing conventional methods, these models advocate for a structural shift that will have long-term, sustainable positive effects on the environment, society, and economy. In order to reduce waste and extend the lifecycle of products, they emphasize design for longevity, reuse, and recycling while adhering to the principles of the circular economy. Examples of early adopters of recycling and take-back programs that set a high bar for circular processes are Patagonia and H&M.

The use of sustainable materials is a key component of these strategies. Eco-friendly materials like recycled polyester, organic cotton, and cutting-edge textiles like Tencel and Piñatex are being used by brands more and more. By preserving resources and reducing emissions, these materials greatly lessen the environmental impact of the fashion industry.

OBJECTIVES

- To research consumer awareness and behavior about sustainable fashion and how it affects corporate operations.
- To research the advantages and difficulties of switching from quick fashion to sustainable fashion models.
- To identify and assess the scalability of innovative technologies that enhance sustainability in the fashion industry.

LITERATURE REVIEW

The integration of sustainability into contemporary fashion business models is examined by Thorisdottir and Johannsdottir (2019). According to their research, environmental obligations, shifting consumer needs, and governmental restrictions all have a significant role in bringing about long-lasting changes in the sector. They do, however, draw attention to a significant dearth of studies evaluating the true efficacy of these sustainability initiatives. They specifically contend that the influence of transparency, which is frequently emphasized as a crucial sustainability principle, is not adequately measured and is not well understood in the research that is currently available.

The study by Muthu (2020) focuses on how consumer awareness influences decisions about sustainable fashion. According to his research, consumers may make more ecologically responsible purchases as a result of more understanding. However, he points out a significant drawback: little research has been done on how consumer knowledge affects real behavior changes over the long run. This disparity shows that although information can pique interest in sustainable fashion, it doesn't always result in steady or long-lasting improvements in consumer behavior.

Pookulangara and Shephard (2020) look on the relationship between consumer behavior and sustainable fashion company models. According to their research, customer propensity to purchase sustainable fashion is significantly influenced by cultural norms and beliefs. Noting that sustainable behavior varies and is highly dependent on socio-cultural context, they highlight a deficit in cross-cultural study.

This result emphasizes the need for additional research comparing various customer groups. Sustainability practices in luxury fashion supply chains are examined by Karaosman et al. (2020). They note that traceability and transparency are becoming more and more important components of responsible production for luxury companies. But the authors also point out a weakness: it's not entirely clear how much these sustainability initiatives improve customer loyalty and brand reputation. According to their research, additional empirical data is required to fully comprehend the strategic benefits of sustainability in the luxury market.

Circular fashion, according to Fletcher and Tham (2021), is a revolutionary concept that prioritizes product longevity, recycling, repair, and reuse. Their analysis demonstrates how circular practices might significantly reduce fashion's consumption of resources and waste. They do, however, also highlight concerns regarding the circular business models' scalability and economic feasibility. The authors contend that the potential of circular fashion might not be completely realized in the absence of appropriate assistance.



In their focus on innovations in sustainable supply chains, Kozłowski et al. (2022) emphasize the importance of tracking, transparency, and traceability technology. Although their study acknowledges the advancements, it also shows that many fashion supply chains are still not well-visible. Environmental damage and unethical work practices are made possible by these transparency problems. Consequently, the authors advocate for more robust mechanisms to enhance responsibility across the supply chain.

Smith et al. (2023) investigate emerging technologies that could significantly reduce environmental effects, such as computerized production systems, bio-based materials, and sophisticated recycling techniques. Despite their potential, the authors note that high costs and limited access hinder their wider use. This discrepancy between economics and technology highlights the necessity of investment and supportive policies to encourage industry adoption.

Fast fashion and sustainable fashion models are assessed by Bhardwaj and Fairhurst (2023). They contend that despite the ethical and environmental benefits of sustainable fashion, fast fashion continues to rule the market due to its accessibility and affordability. The authors highlight the lack of robust governmental measures and the public's poor comprehension of sustainability as significant barriers to industrial change. In order to promote sustainable consumption, their work advocates for improved consumer education and the creation of policies.

Bonelli, Caferra, and Morone (2024) examine the social and environmental effects of the fast fashion system. They demand a more equitable and environmentally responsible fashion business. According to their analysis, sustainability initiatives frequently overlook socioeconomic and cultural circumstances, which leads to insufficient or ineffectual actions. They emphasize the necessity of a sustainability strategy that takes into account social well-being, justice, inclusivity, and environmental preservation. Regarding the sociocultural facets of sustainable fashion, the authors identify a substantial study vacuum.

Gálvez-Sánchez et al. (2024) examine the ways in which fashion brands are embracing circular economy concepts and sustainability initiatives. They observe notable advancements in environmental business tactics and customer awareness. They do, however, draw attention to the continuous conflict between economic needs and ecological aims. Their research demonstrates that businesses that prioritize profit find it difficult to achieve long-term sustainability, exposing a lack of solutions that successfully combine environmental objectives with financial success.

The emergence of greenwashing in the fashion sector is examined by Choi and Cheng (2024). They demonstrate how deceptive environmental claims undermine customer confidence and impede sustainability initiatives. Their analysis highlights how lax regulatory oversight permits greenwashing to persist. To make sure sustainability claims are authentic, they call for more regulations, enforcement mechanisms, and verification standards.

Focusing on the social side of sustainability, Jones and Brown (2024) assert that a truly sustainable fashion system must prioritize community well-being, fair salaries, and worker welfare. They contend that the sector frequently prioritizes environmental considerations over social responsibility. Their research highlights the need for a thorough sustainability framework by pointing out a gap in integrated approaches that blend ecological and human-centered sustainability.

RESEARCH MODEL

The research model illustrates a number of variables that are probably going to affect the fashion industry's adoption of sustainable business methods. It connects three crucial elements:

- Input factors:

Include consumer awareness, technical advancements, social responsibility, and environmental practices. These factors



serve as the main motivators for promoting sustainability in the fashion industry.

- Sustainable Business Model Practices:

In order to illustrate how brands apply sustainability, the model's fundamental components include ethical production, recycling, slow fashion, circular economy techniques, and transparency.

- Results:

According to the model, adopting sustainable practices is positively correlated with improved consumer behavior, a smaller environmental effect, and successful business performance. The overall model illustrates the connection between sustainability drivers, brands' adoption of sustainable practices, and the favorable outcomes that ensue.

HYPOTHESIS

H₁: There is a significant relationship between consumers' awareness of sustainable fashion practices, such as eco-friendly materials, ethical labor standards, and circular fashion models, and their purchasing behavior toward sustainable clothing.

H₂: Consumers who value transparency, ethical production, and environmental responsibility have more positive attitudes toward sustainable fashion brands.

H₃: Positive consumer attitudes toward sustainability do not significantly relate to their willingness to pay higher prices for sustainable fashion products, showing an attitude-behavior gap.

METHODOLOGY

A quantitative research design is used in this study to examine sustainable business models in the fashion sector. The design aids in investigating contemporary sustainability techniques and comprehending customer perceptions of eco-friendly fashion.

Since consumers between the ages of 18 and 25 are heavily involved in the consumption of fashion products and accurately represent current consumer trends, the primary data was gathered using a 10-item multiple-choice questionnaire. The survey evaluated attitudes, purchasing patterns, and awareness of rapid fashion and sustainable fashion.

To give a theoretical framework and an understanding of industry aspects, secondary data was obtained from scholarly journals and sustainability publications.

Because it was convenient and pertinent to the investigation, a convenience sampling technique was employed to choose the respondents.

Throughout the study, respondents' identities and confidentiality were preserved.

RESEARCH DESIGN

The investigation was carried out utilizing a quantitative approach. This approach aids in capturing sustainable fashion industry business models. It is appropriate since it enables the researcher to evaluate consumer knowledge, clarify current sustainability practices, and comprehend attitudes toward sustainable fashion.

The structured survey's quantitative data allows for the identification of patterns and trends by quantifying customer opinions and actions.

This method guarantees a comprehensive perspective and enhances the validity of the results when used in this study design. It offers viewpoints from both industry practices and customers.

SAMPLE DESIGN

The sample design for this study uses a non-probability convenience sampling method. This method allows the researcher to quickly and efficiently collect data from easily accessible respondents. The target population includes young consumers aged 18 to 25. This group is the most fashion-conscious and plays a significant role in shaping sustainable consumption patterns.

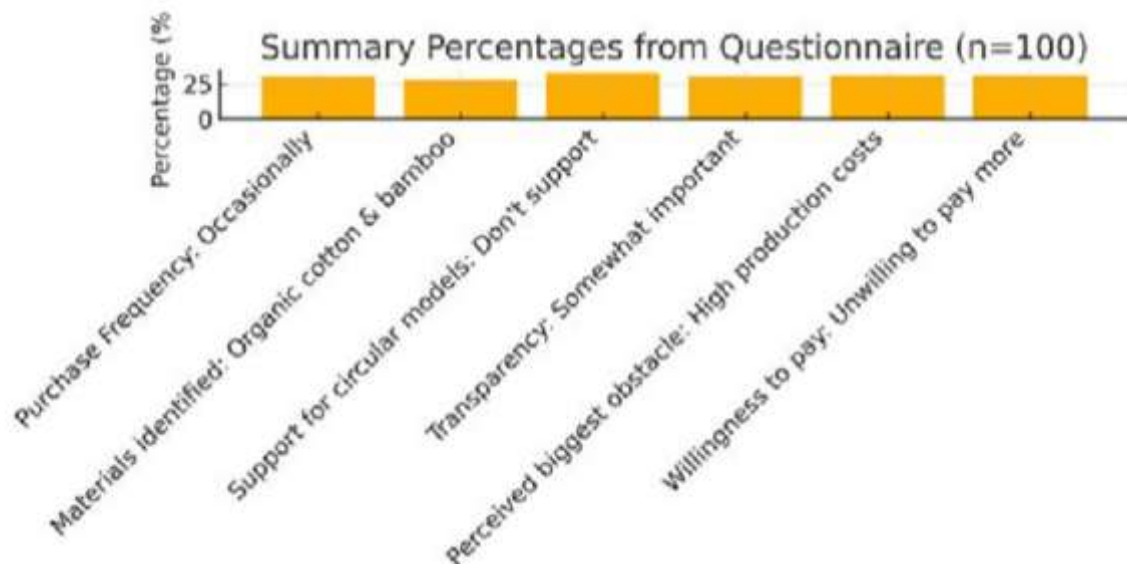
A structured 10 multiple choice questionnaire was given to participants in this age group through online platforms. This method makes the sample easy to obtain while still capturing important insights about consumer attitudes, awareness, and behaviors related to sustainable fashion.

DATA ANALYSIS

There is a moderate level of awareness and little participation with sustainable fashion, according to the data gathered from 100 respondents. Thirty percent of responders said they only infrequently purchase sustainable apparel. Just 28% of respondents were able to accurately identify sustainable materials like bamboo and organic cotton. 33% of respondents do not support resale or rental systems, indicating a lack of support for circular fashion models. Thirty percent of participants rated transparency as "somewhat important," indicating that it has little influence on their decisions to buy.

With all p-values over 0.05, chi-square tests revealed no significant correlations between awareness, attitudes, perceived barriers, and willingness to pay. This demonstrates that there is an attitude-behavior gap, meaning that favorable views on sustainability do not always result in sustainable consumer behavior.

Combined Charts from Questionnaire Data

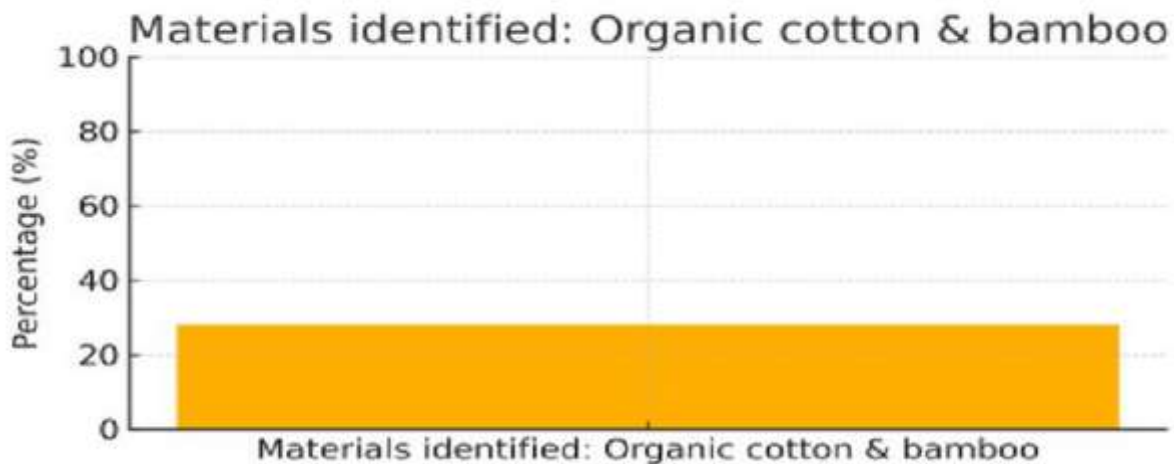


The main variables from the questionnaire are contrasted in this graphic. It demonstrates that the biggest number (33%) has to do with a lack of support for models of circular fashion. Adoption of sustainable fashion is significantly hampered by

high production costs and a 31% reluctance to pay extra. However, just 28% of respondents correctly identified sustainable materials like bamboo and organic cotton. The attitude-behavior divide among young customers is graphically highlighted in this overview, which also identifies affordability and ignorance as key problems.



According to this bar graph, 30% of respondents claimed to "occasionally" purchase sustainable fashion. This implies that although young consumers do shop sustainably, they do not do so on a regular basis. The graph shows that occasionally, sustainable purchases are made, most likely due to price or limited product availability.

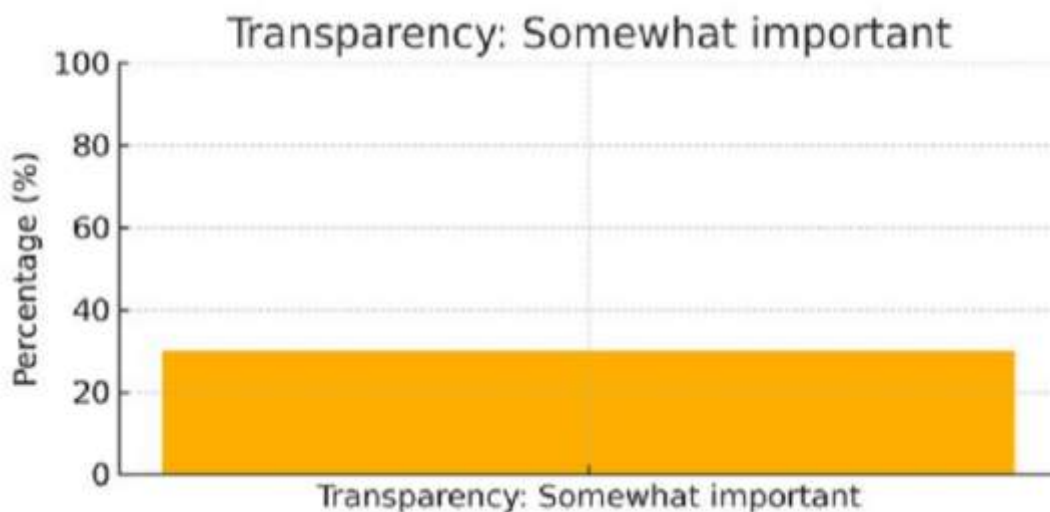


This chart shows that only 28% of participants correctly identified organic cotton and bamboo as sustainable materials. This suggests a moderate understanding of eco-friendly textile

options. The low percentage reveals a gap in awareness about specific materials. This points to the need for more consumer education on environmentally friendly fabrics.

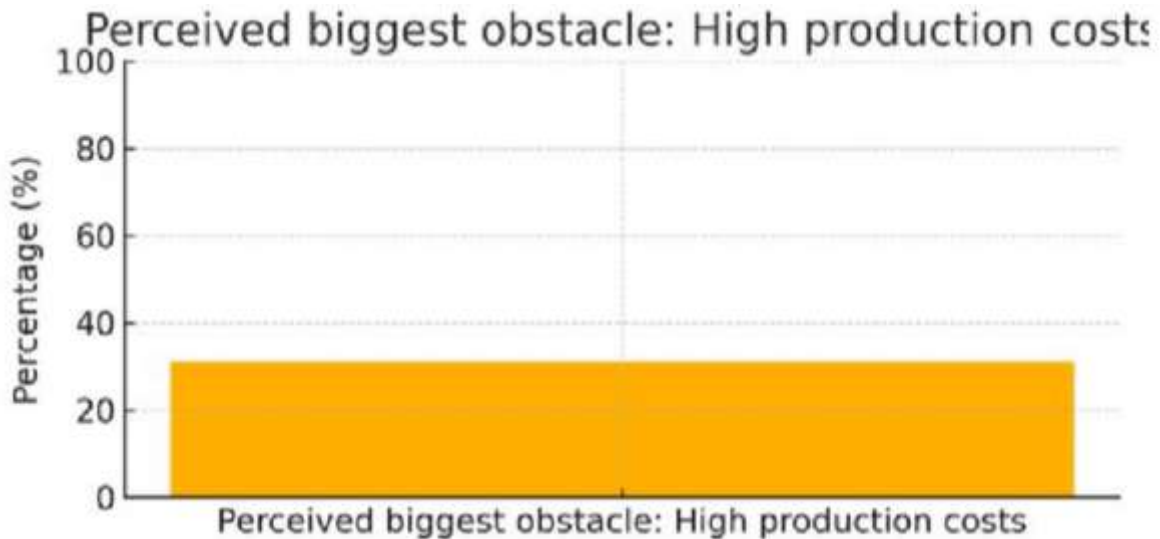


The chart shows that 33% of respondents do not support circular models like resale, repair, or clothing rental. Despite a global interest in circular fashion, this result indicates low practical acceptance among young people. Possible reasons could include a lack of familiarity, mistrust of secondhand products, or limited access to circular platforms.



This chart shows that 30% of respondents view transparency as “somewhat important.” While people see transparency as valuable, it does not seem to be a key factor in their purchase

decisions. This aligns with earlier findings that consumer interest in sustainability doesn't always lead to strong buying commitment.



The bar chart shows that 31% of respondents believe high production costs are the biggest barrier for fashion brands in adopting sustainability. This view matches industry research, which indicates that using sustainable materials and ethical processes often raises production costs.

This finding suggests that affordability is a major challenge for both brands and consumers.



This chart shows that 31% of respondents are unwilling to pay higher prices for sustainable fashion. This supports the presence of a strong attitude–behavior gap: although many consumers express positive attitudes toward sustainability, they are reluctant to pay premium prices. This reinforces affordability as a major limiting factor in sustainable fashion adoption.

Summary Table

Measure	Percentage (%)
Purchase Frequency: Occasionally	30
Materials identified: Organic cotton & bamboo	28
Support for circular models: Don't support	33
Transparency: Somewhat important	30
Perceived biggest obstacle: High production costs	31
Willingness to pay: Unwilling to pay more	31

By displaying the percentage of respondents who selected each major option, the summary table presents the key findings from the survey. According to the findings, 30% of participants only rarely purchase sustainable fashion, indicating moderate yet erratic purchasing patterns. Only 28% of respondents properly identified bamboo and organic cotton, indicating a poor level of awareness of sustainable materials. Additionally, there is little support for circular fashion models; 33% of respondents oppose rental and resale activities. Thirty percent of participants think transparency is somewhat important.

Cost-related difficulties are also highlighted in the table. The largest obstacle to sustainable fashion, according to 31% of respondents, is high production costs, and the same proportion is unwilling to pay higher prices. Overall, the summary table shows that although people have generally positive sentiments about sustainability, low understanding, limited support for circular activities, and cost are preventing actual behaviors.

FINDINGS

According to this report, young shoppers between the ages of 18 and 25 are very conscious of sustainable fashion. They comprehend ideas like fair work methods, waste minimization, and environmentally friendly materials.

Though they generally have strong sentiments toward sustainability, this is not necessarily reflected in their shopping habits.

Only a small percentage of respondents are willing to spend more for sustainable fashion, despite the majority seeing it as crucial for the future. One of the biggest obstacles is affordability. Even though people are aware of the detrimental consequences fast fashion has on the environment and society, it is still more popular because it is less expensive and more convenient.

Other intriguing results show that while worries about greenwashing undermine trust in company promises about sustainability, transparency increases trust. The respondents are interested in circular models like resale and leasing services and favor tech-driven sustainability solutions. Many people also care about issues like safe working conditions and fair wages.



Wider adoption is hampered by high product costs, restricted availability, a lack of design diversity, and a lack of clarity regarding what true sustainability actually entails. Although young customers have a preference for sustainable fashion, practical and budgetary obstacles limit their involvement.

DISCUSSION AND CONCLUSION

DISCUSSION

The study's findings have demonstrated a glaring discrepancy between young customers' understanding of sustainable fashion and their real purchase patterns. Although the majority of respondents, who are between the ages of 18 and 25, acknowledge the significance of sustainability and exhibit favorable sentiments toward ethical labor practices, transparency, and environmentally friendly materials, their purchasing habits do not significantly reflect these sentiments. The statistical findings, which demonstrate that there is no substantial correlation between consumers' perceived industry constraints, environmental awareness, or transparency concerns and their willingness to pay more, further confirm this.

The research, which lists price, ease of use, and restricted product availability as some of the main obstacles to the adoption of sustainable fashion, also supports this attitude-behavior divide. One way that fast fashion remains popular despite consumers' awareness of its detrimental effects on the environment and society is through its variety and cost. Concerns about greenwashing also erode confidence, so brands must communicate more credibly. Although young customers are interested in technical solutions and circular models, this is frequently constrained by real-world issues with cost and accessibility.

All things considered, the conversation demonstrates that while sustainability is becoming more popular among the younger generation, economic considerations and erratic consumer behavior prevent sustainable company concepts from widely spreading throughout the sector.

CONCLUSION

The results show that although young consumers are aware of sustainable fashion and have positive sentiments about it, they are unable to develop the sustainable buying habit because of factors including cost, a lack of product options, and skepticism about brand claims. Positive attitudes do not significantly affect the desire to pay extra for sustainable apparel, according to statistical studies.

The findings show that fashion firms must strike a balance between cost and sustainability while maintaining transparency, expanding their product offerings, and funding consumer education. The identification and subsequent removal of these obstacles will be crucial to the long-term viability and wider acceptance of sustainable business models, as sustainability becomes more and more central to discussions about fashion worldwide.

IMPLICATIONS

The study's conclusions have several significant ramifications for the fashion sector. First, the biggest obstacle to sustainable consumption is still pricing, which means that in order to promote broader adoption, marketers need to focus on creating affordable sustainable products. Second, there is a need for more transparent communication and reliable sustainability reporting since customers like transparency but are turned off by greenwashing. Third, the moderate knowledge of sustainable materials highlights how crucial consumer education initiatives are to fostering understanding and influencing consumer behavior. Brands may have a chance to extend product lifecycles by expanding their products in response to consumer interest in circular models like resale and rental services. Lastly, in order to boost customer confidence and lower industry-wide obstacles, legislators and trade associations should promote sustainability through incentives, regulations, and uniform certification programs.



LIMITATION AND FUTURE SCOPE

Limitations of the Study

1. Reliance on secondary data:

Much of the understanding of sustainable business models came from published literature rather than direct industry observation.

2. Narrow demographic focus.

The targeted group for this study only ranged from 18 to 25 years, which is not representative of older or more diverse consumer groups.

3. Limited geographic context:

Perceptions and practices of sustainability also vary by country, and this study does not capture global differences.

4. Focus mostly on environmental aspects.

While social and economic dimensions of sustainability were also included, they were less deeply explored.

Future Scope of the Study

1. Conduct real primary data collection.

Future research should utilize real survey responses, interviews, or focus groups to get more accurate consumer insights.

2. Expand sample size and demographics.

Including different age groups, regions, and income classes would bring a wider perspective on consumer behavior.

3. Study brand-side sustainability practices.

Future research might examine how fashion companies are implementing sustainability and what operational obstacles they encounter.

4. Discover the technological innovations in detail:

Research could investigate how digital tools, recycling technologies, and traceability systems can help scale sustainable fashion.

5. Integrate environmental, social, and economic sustainability.

A more holistic model can help gain an understanding of how all three pillars of sustainability work together in fashion.



ANNEXURE 1: QUESTIONNAIRE

1. What do you consider the most important element of a sustainable business model in fashion?
 - A. Reducing environmental impact
 - B. Promoting ethical labor practices
 - C. Ensuring profitability
 - D. Innovating product designs
2. How often do you purchase clothing from sustainable fashion brands?
 - A. Always
 - B. Often
 - C. Occasionally
 - D. Never
3. What materials do you associate with sustainable fashion?
 - A. Organic cotton and bamboo
 - B. Recycled polyester
 - C. Conventional synthetic fabrics
 - D. I'm unsure
4. Which of the following practices do you think is most effective in reducing waste in fashion?
 - A. Recycling old clothes
 - B. Using biodegradable fabrics
 - C. Offering repair services
 - D. All of the above
5. What is your opinion of fashion brands adopting a circular economy model?
 - A. Strongly support
 - B. Somewhat support



- C. Neutral
 - D. Don't support
6. What motivates you to support sustainable fashion brands?
- A. Environmental awareness
 - B. Support for ethical labor
 - C. Unique product designs
 - D. Peer influence
7. Do you believe transparency in supply chains is important for sustainable fashion?
- A. Yes, very important
 - B. Somewhat important
 - C. Neutral
 - D. No, not important
8. Which obstacle do you think fashion brands face the most when implementing sustainability?
- A. High production costs
 - B. Consumer unwillingness to pay higher prices
 - C. Limited access to sustainable materials
 - D. Lack of awareness about sustainability
9. In your opinion, how can consumers contribute to promoting sustainable fashion?
- A. Buying from ethical brands
 - B. Recycling clothes
 - C. Supporting secondhand markets
 - D. All of the above
10. How likely are you to pay a higher price for sustainably produced clothing?
- A. Very likely



- B. Somewhat likely
- C. Not likely
- D. Never

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