

THE STRUCTURE OF THE GHANA FASHION INDUSTRY IN THE IMPLEMENTATION OF SUSTAINABLE STRATEGIES

Authors

Akosua Mawuse Amankwah, Edward Appiah, Charles Frimpong and Anthony Kent*
Faculty of Art, CABE, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.

*Nottingham Trent University, Nottingham, United Kingdom

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Abstract

The fashion industry has gained a reputation for contributing to the adverse effects on the planetary system and social foundations due to its traditional model of production. The advocacy for imbibing sustainability in fashion businesses has been on the rise. The structure of the fashion industry in different geographical locations, production history, and practices play a significant role in the adoption and implementation of sustainable strategies. This study looks at the history and structure of the fashion industry in Ghana as a prerequisite to the consideration of the adoption and implementation of sustainable strategies. As a preliminary study to aid the selection of respondents for substantive doctoral research, a google survey, employing a snowball technique in identifying respondents within the two major cities in Ghana (Accra and Kumasi) was adopted. The survey targeted fashion producers within the SMEs sector who have physical retail outlets. From 84 respondents, findings reveal young businesses of a sole proprietorship, whose founders double as lead designers with the minimum educational qualification from Basic Schools. The majority are informal businesses that mostly use foreign imported fabrics as supplements for local textile, and products sold primarily to local consumers, through direct-to-end user transactions. They engaged in customization, timeless design, and design for longevity. Although previous studies have documented similar findings, this study ties the findings to the adoption of sustainable strategies in businesses that have owners as creative heads who take major decisions that affect the implementation of sustainable strategies. The study reveals that sustainability and sustainable practices are relatively new to SMEs in Ghana. While end product transactions are done predominantly at the production site by walk-in customers, physical retail outlets are rising steadily. The study recommends further studies on formal businesses with retail outlets on their awareness of Circular Strategies and their willingness for the adoption and implementation of models that are sustainable in the face of industrialization drive.

Introduction

The textiles and clothing sector is a significant part of the world's economy. The fashion industry is one of the largest industrial sectors in the world (Mukherjee, 2015). A significant part of the sector is dominated by developing countries particularly Asia, accounting for half of the world export, by which China is the lead. The production of textile for apparel is predominantly produced in developing countries (WRAP, 2012). Characterized by a complex supply chain, the fashion industry globally operates in different capacities, classified as large, medium, and small to micro- scale industries with dominating players designated as Small to Medium-scale Enterprises. According to the International Finance Corporation (IFC, 2012), small and medium enterprises (SMEs) account for about 90 percent of businesses, and more than 50 percent of employment worldwide. The report indicated that SMEs are key engines of job creation and economic growth in developing countries, and that includes Ghana. As a developing economy engaged in fashion production, sustainability issues and implementation of sustainable strategies (SS) should be a concern to producers who have a nagging desire to scale up production. This study aims at examining fashion business ownership, functions, and operations, and how these influence the adoption and implementation of Circular strategies in Ghana.

Literature

Industry Practice

Broadly, the fashion industry is structured on four independent but mutually inclusive levels regarding, primary, secondary, retail, and auxiliary. These culminate into a complex supply chain (Boone, 2009, DEFRA, 2011, Lehmann *et al.*, 2018) quite different from other industries. Bhardwaj and Fairhurst, (2010) provide a comprehensive analysis of changes in the fashion industry, thanks to fast fashion. Along with its complex nature are adverse negative environmental and social impacts outlined by most researchers (Allwood *et al.*, 2006, Kozłowski, Bardecki and Searcy, 2012, Lehmann *et al.*, 2018, Koszewska, 2018, Karell and Niinimäki, 2020). Akin to the activities of the industry are sustainability issues that have to be managed locally and globally by all nations (Bhamra, T.A., Hernandez-Pardo, 2013). With the domination of SMEs in the Ghanaian garment production sector (Ghana Statistical Service, 2015, Japan International Corporation Agency, 2008), Williamson, Lynch-Wood and Ramsay (2006) purported that there is a lack of data on the environmental image and damage caused by SMEs, however, with many small activities, their cumulative impact could be significant.

Sustainability and Sustainable Strategies

Sustainability issues are rife in the fashion industry, owing to the enormous environmental and social impact of both consumers and all industry actors. Hence most companies, both large and small are embracing sustainability (Shields and Shelleman, 2015, Kozłowski, et al., 2015).

Kozlowski, Searcy and Bardecki (2015) asserted that the last decade has witnessed the sustainability awareness of the environmental and social impacts and research into sustainable strategies. Sustainable strategy is largely used to cover different models or classifications to achieve sustainability (Cooper et al., 2013, Gwilt and Rissanen, 2011, Niinimäki, 2013, Niinimäki, 2015, Bocken *et al.*, 2014). There has been an advocacy for a massive system transformation (Environmental Audit Committee, 2019, WRAP, 2015, Lehmann, et al., 2019, Kozlowski, et al., 2018). According to Murray (2013), Sustainable design (also called Eco-design, green design, and environmental design) is the philosophy of designing physical objects, the built environment, and services to comply with the principles of sustainability (environmental, economic, and social). One of the system transformation approaches is the Circular economy (Macarthur, 2010, WRAP, 2017) with its core three principles which include; reduce, reuse and recycle. How companies adopt and implement these values is dependent on the organizational structure and business objective. The circular economy accordingly is regarded more transformational as it incorporates both the environmental and social dimensions of sustainability (Bocken et al., 2014).

Adopting Sustainable Strategies

According to Karell and Niinimäki (2020), a significant number of fashion/clothing brands of different sizes and in different geographical locations are embracing the call of change in the fashion industry, and sustainable business strategies are on a steady rise, according to Shields and Shelleman (2015). There is a substantial body of literature on large-scale businesses with little focus on small to medium scale enterprises (Ates & Butitci, 2011 cited Sloan, Klingenberg and Rider, 2013, Sloan et al, 2013). However, operating capacities differ and hence issues regarding sustainability in the fashion industry may relate to the designations differently. Again Sloan et al., cited in Demartini et al. (2011), report that at present, there exists no convincing evidence that sustainability strategies now being used by large companies are viable for SMEs.

According to Claxton and Kent, (2017), particularly for fashion businesses, mainstream and niche fashion brands' approach to sustainability is likely to differ due to organizational and managerial factors. Even though there is a generic sequence of activity (Gwilt & Rissanen, 2011), Sinha, (2002), is of the view that the 'fashion designer must be a market researcher of visual and qualitative data, an analyst of the collected data, an interpreter of meanings and a negotiator in an expansive decision-making process'. Sinha cited Stecker (1996) purporting that the definition of the modern fashion designer is dependent on the designer's experience, the company, the type of garments produced, and the constraints upon the design. Aligning to Stecker's definition, especially on the variable on company type, Claxton and Kent (2017) are of the view that 'for small designer-led businesses the designer can be at the center of the process, and affirm Curwen, Park and Sarkar, (2012) assertion that the designer must have the mandate through the alignment of business culture, objectives, structure, and processes.

The Designer Role

It has also been articulated by many authors that designers have the capacity of influencing sustainability at the early stages of design (Gwilt and Rissanen, 2011, Murray, 2013, Koszewska, 2018). As much as “80% of the environmental and social impacts of a product, incurred throughout its whole life-cycle” could be influenced already in the product design and development phase (Tischner & Charter 2001 as cited in Karell & Niinimäki 2020, Murray, 2013). Kozlowski, Bardecki, and Searcy (2018) emphasized that fashion designers are key agents of change in the transformation to a sustainable fashion industry. As material (textile production) is a huge factor in environmental sustainability, the choice of raw materials (Lehmann et al., 2018) can determine up to half of a fashion brand’s environmental footprint of businesses across sectors and requires proactive decisions at the initial stages of production activities to get it right.

The Study Framework

This study draws on Claxton and Kent's assertion of the possibility of designers to be at the forefront of design activities in small designer-led businesses as a foundation and adapts the Innovative design-driven sustainable business model developed by Kozlowski, Bardecki, and Searcy (2018) as a guide for the conceptual framework for the study analysis. They outlined four major obstacles to the implementation of sustainability in the design process to include: company capacity and mindset; industry practices and norms; consumer behavior and expectation; technological restrictions. This study is focused on company capacity, and industry practices and norms. Building on Meadows, (2008) it is imperative to examine the elements in the structure of small designer-led businesses and how these elements jointly impact the adoption and implementation of sustainable strategies in Ghana. Figure 1 shows the adapted framework of Meadows (2008) and Kozlowski et al. (2018).

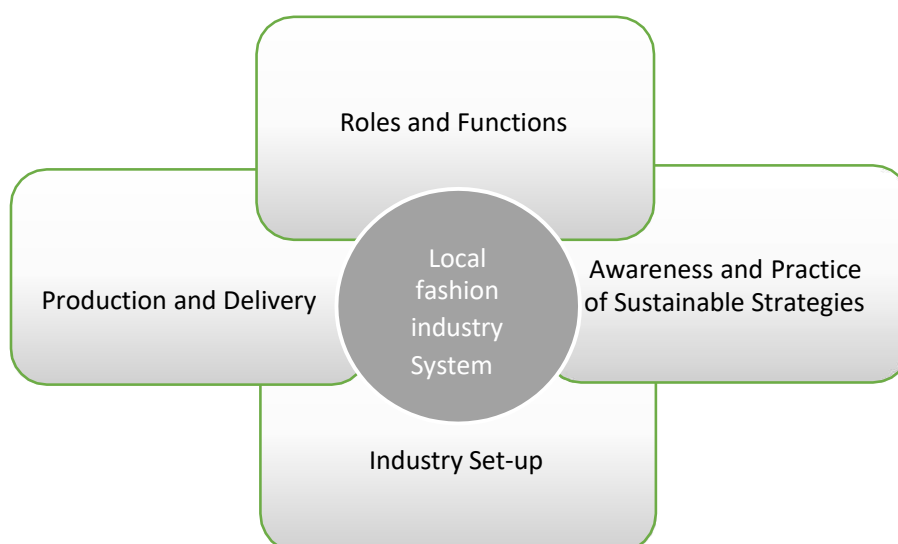


Figure 1. Thinking in Fashion System. Adapted Framework from Meadows (2008) and Kozlowski et al. (2018)

Meadows (2008) talks about a system as an interconnected set of elements that is coherently organized in a way that achieves something and creates its pattern of behavior over time. In essence, Fig 1, represents elements that connect in the practice of fashion production as far as the industry in Ghana is concerned. Accordingly, once the structure is identified and understood, it will help in identifying underlining patterns of how things work (Meadows 2008), and mitigations necessary for better behavior patterns towards sustainability. In general terms, the four elements in fig 1 are indications of how garment producers in Ghana generally operate, how they identify with sustainable strategies, and the opportunities available for local producers. This forms the basis of the study analysis.

Method

As a preliminary investigation into doctoral research, the study sought to find out the basic structure of the Ghanaian fashion industry to enable the selection of targeted respondents for ongoing research. To have a vast knowledge of an industry characterized by micro, small to medium-scale enterprises, a quantitative case study approach was employed to explain what practices generally exist, and the willingness of respondents to participate in further investigation. Yin (2018), explained that where numerical evidence is required, a quantitative approach to a case study is an option.

Data Collection and Analysis

This phase of the study which comprises the planning, dissemination, analysis, and reporting took place between May and November 2021. Closed-ended questions were developed to include, respondent background information and role in the firm, basic information of the firm, size and sector of operation, fabric types used and source, awareness, and practice of sustainable strategies. The survey sample was largely dependent on fashion producers with at least a basic education, in the two main regions in Ghana, who own and operate a firm. This was to gauge their current production strategies and awareness of sustainable fashion in anticipation of the implementation of a circular approach. The structure of these firms was deemed relevant in this regard. As data collection was occasioned amid the Covid 19 pandemic, google form was employed. A purposive sampling strategy (Maxwell, 2012) was adopted to ensure that data was collected from garment producers with formal education as some questions were deemed technical. Hence a snowball technique (Cohen et al., 2007) was employed as respondents were asked to identify and forward questions to other qualified respondents. Initial respondents were known to the researchers and therefore provided data on several other respondents. A total of 104 respondents were reached, out of which 84 responses were recorded. The collected data from the google forms were collated with Microsoft excel and analyzed. Although the survey was intended for the two major regions in Ghana (Accra and Kumasi) some strayed responses were identified to have emerged from Ho and Tarkoradi both in the Volta and Western regions of Ghana with total responses of 4(5.2%) and 1(1.3%) respectively. The results have been categorized into four major areas and are presented and discussed in the following text.

Results and Discussions

The primary focus of the survey was to establish business ownership and functions and how these influence the implementation of Circular Strategies in Ghana. Table one (1) presents the basic demographic information of respondents

<i>ITEM</i>	<i>Frequency</i>	<i>Percentage</i>
<i>Level of Education</i>		
<i>Basic</i>	6	7.80
<i>Secondary</i>	12	15.60
<i>Diploma</i>	5	6.50
<i>1st Degree</i>	42	54.50
<i>2nd Degree</i>	11	14.30
<i>None</i>	1	1.30

Table 1. Level of education of respondents. Source: Authors

From table one, it is evident that the majority of respondents (54.50%) are operating with first degree, followed by secondary education (15.60%) and second degree (14.30%). Although education is not a key consideration for this study, an impressive number with higher education makes room for easy comprehension of current issues facing the fashion industry both in Ghana and globally. It was however surprising to note that only 6.50% of respondents were diploma holders, given that fashion education in the tertiary level started with the Polytechnic and hence would have recorded significant scores. This low representation can be explained with the google form circulation by initial respondents.

Roles and Functions

Following the educational background, the survey sought to identify the Founder/Owner of the firm, current position, description of the role, and the approach of design of the respondents. Table 2 provides information on this segment.

<i>ITEM</i>	<i>FREQUENCY</i>	<i>PERCENTAGE</i>
<i>FOUNDER</i>		
<i>Myself</i>	44	57.1
<i>Partnership</i>	4	5.2
<i>Other</i>	29	37.66
<i>POSITION IN FIRM</i>		
<i>Creative Director</i>	55	71.4
<i>Pattern Designer</i>	7	9.10
<i>Production Manager</i>	9	11.60
	2	2.60

<i>Marketing Manager</i>	3	3.90
<i>CEO</i>		
<i>ROLE DESCRIPTION</i>	27	35.10
<i>Designer</i>	1	1.30
<i>Producer</i>	49	63.60
<i>Designer/Producer</i>		
<i>DESIGNER</i>		
<i>APPROACH</i>	24	31.20
<i>Apparel Designer</i>	53	68.80
<i>Fashion Designer</i>		

Table 2: Respondent Roles and Function, Source: Authors

Inferring from table 2, 57.1% of respondents established their firm against 5.2% and 37.66 % for partnership and other means of establishment. This confirms the claim of the Ghana Statistical Service (GSS, 2016) report that ownership of fashion enterprises in Ghana are predominantly sole proprietors. Again, 71.4% indicated that they are the Creative Directors of their firms, followed by 9.10% as Pattern Designers, 11.60% as Production Managers, 2.60% as Marketing Managers, and 3.10% as CEO. The founder is also the creative lead of the firm. From the analysis on role description, 35.10% referred to themselves as Designers, 1.30% as Producers, and 63.60% as Designers/Producers. This is leaning towards founders who design and produce their fashion products. Results from the designers' approach indicated that 68.8% see themselves as fashion designers while 31.20% see their approach as apparel designers. From the results, the majority of designers are also the owners and creative leads, who see to the production of their designed garments and coordinate the entire development process. Certainly, they will have the mandate to align business culture, objective, structure, and processes, as asserted by Curwen, Park and Sarkar, (2012) in the event of adopting and implementing sustainable strategies. Because the majority see themselves as fashion designers as opposed to apparel, influences of trends and the practice of sustainable strategies (Hur & Cassidy, 2019) are issues for consideration in the adoption and implementation. It must be noted that, in contrast to the design approach in the West, consumers in Ghana play a direct and very significant role in the fashion design process, in terms of material, style, and aesthetic, and may greatly influence the designer on the outcome of garments produced. Hence, although local designers have a high level of sovereignty, consumers' direct participation in the process will greatly impact the adoption and implementation of sustainable strategies. By this, consumers bring to bear their preferred strategies through a direct dialogue with the creative lead of the firm, albeit aligned with the objectives of the firm. On the other hand, the few firms that operate an absolute ready-to-wear module, with a relatively smaller customer base as opposed to advanced fashion markets tend to audit their product offerings to respond swiftly to emerging customer preferences in real-time as production sites are in the same location or proximity to retail outlets.

Industry Set-Up

Having looked at the roles and functions of respondents, it was necessary to examine the firm location, size, duration of operation, and product category. These elements are important considerations in the description of an industry structure as these influence to a large extent how the firm operates (Minai, 2014) and its influence on sustainability. The following demonstrates a view of these elements in the structure of the fashion industry in Ghana.

Firm Location

The study analysis showed that the majority of respondents are situated in Accra with 71.4% representation, followed by 22.1% in Kumasi, 5.2% in Ho, and 1.3% in Takoradi. It must be noted however that percentages from Ho and Takoradi are considered as strayed responses as they were not sampled for the survey. The total percentage of these two cities is negligible and does not negatively affect the outcome of the survey. Again GSS (2016) and JICA (2020), confirmed Accra and Kumasi as being the two major hubs of garment producers in Ghana. The firm location was viewed as an important element (Kimmelberg and Williams, 2013, Minai, 2014) in the local fashion system as this influences the selection and production techniques and, the required volumes per a firm's target population. Accra and Kumasi currently host major business and higher educational institutions with a myriad of activities that command the production of certain fashion products per market demand. Sustainability issues therefore cannot be overlooked. A firm's structure and processes, to its location and business objective, will greatly impact the adoption and implementation of sustainable strategies. With the steady rise in retail outlets in these locations, there persist the culture of bespoke/made-to-measure model of production, which concurrently run with products for retail shops, a situation that is currently being studied in Ghana by the authors, to examine firms' current models and implications on sustainability and strategies adoption.

Years of Firm's Operation

The number of years of operation is likely to indicate practices that are unsustainable to a firm in the authors' opinion and hence was a consideration in the survey. The results revealed that 40.3% of respondents started operating between 1-5 years, 39.0% between 6-10 years, 15.6% between 11- 15 years, 1.3% between 16-20 years, and 3.9% operating 20 years and above. It is clear that the fashion industry in Ghana has seen growth in its establishment in recent years, and evolving. Issues on sustainability gained prominence in the last decade globally. Interestingly, the majority of fashion businesses in Ghana were established in the last decade as per the result of the study. It is imperative therefore to align business practices with sustainability and sustainable strategies (Thorisdottir and Johannsdottir, 2019) as the local fashion industry evolves so fashion firms will make efforts to attune and imbibe the associated principles.

Firm Size

The size of a firm plays a major role in the implementation of Circular strategies. The results indicated that 64.9% of respondents are micro-sized firms, 27.3% representing small scale, 5.2% medium scale, and 2.6% large scale firms. The findings attest to recent reports on the fashion sector in Ghana (GSS, 2016 & JICA, 2020) on the domination of micro and small-scale fashion firms in Ghana. Although there is no quantifiable evidence of the waste generation of these firms, Williamson et al. (2006) are of the view that with many small activities, their cumulative impact could be significant. However, with the increase in micro and small firms, owners of these businesses who are also designers and producers can easily identify unsustainable practices and systemic issues, favorable or unfavorable, and the rectifications necessary to effect the adoption and implementation of sustainable strategies. Moreover, firm sizes and production capacities of local producers determine skill levels required for specific tasks. The adoption of specific strategies will have to correlate with the size of the firm and skill availability. Relevant skills peculiar to specific strategies need to be examined for their availability and other requirements for operationalisation. It must be noted however that, the skill gap has been identified as one of the challenges of the Ghana fashion industry (Senayah, 2018), which has greatly impacted the qualities of items produced. As the adoption of SS requires skill, technology, and technical know-how, local firms will have to examine their current model to aid adoption. As sustainability in fashion appears to be an unexplored research area in Ghana, the authors are currently conducting further research aimed at bringing to the fore the various facets of the subject with accompanying social- cultural impacts.

Business Sector Operation

The sector of operation is also a key factor in an industry structure and aids the implementation of policies and strategies (Thorisdottir, and Johannsdottir, 2019, Minai, 2014). As an industry in its developmental stage, 39.00% of respondents are operating under the formal sector while 61.00% are under the informal sector. An industry with high numbers of micro-firms that are also informal creates managerial challenges due to unstructured and procedural lapses. Sinha (2002) mentioned that the ‘fashion designer must be a market researcher of visual and qualitative data, an analyst of the collected data, an interpreter of meanings and a negotiator in an expansive decision-making process’ Stecker's opinion on the designer's experience and the company type becomes relevant. However, these are activities that undoubtedly could be missing in predominately composed micro to small firms with regards to sustainable practices, and requires further investigation into local firms' business models to identify the lapses. Even though the business owners may have the mandate according to Claxton and Kent (2017) to align processes and practices, they may lack the experience and work organization in dealing with the complex nature of sustainability.

Production

The issue of implementation of sustainable strategies largely boils down to production processes. This section presents results on fabrics and sources, production location and module, energy type, and delivery channel. The connection between these elements brings to the fore

the underlying pattern and how they impact the adoption of sustainable strategies. In table 3, fabrics mostly used for garment production according to the survey is 70.10 % for cotton and polyester blends. This was followed by 29.90% cotton, 0.00% for polyesters, and 0.00% indicating none of the fabrics are used. Regarding fabric source, 16.90% of fabrics are sourced locally, 24.70% are imported fabrics bought from the open market, while 57.10% are both imported and locally made fabrics, while 1.3% constitute missing responses. Garment producers compliment local fabrics with imported ones for material input. While local textile producers concentrate mainly on cotton production, a 70.10% use of both cotton and polyesters pointing to a blend, corresponds with 57.10% use of imported fabrics. It, therefore, could be argued that the majority of fabrics used for garment production in Ghana are blends of imported fabrics. This falls in line with the global trends of the use of polyesters and blends in garment production (Allwood *et al.*, 2006, WRAP, 2017).

Quite apart from imported fabrics, there are indigenous local textiles like the famous Asante Kente, tie/die, and batik among others. However, material components for the production of these fabrics are largely imported, production processes are cumbersome, as their processing requires to a large extent, manual techniques and hence increase the cost of production and selling prices. Unavailability of these indigenous fabrics in volumes impedes their usage for the production of retail pieces in volumes, however ideal for limited quantities. In a less trend-driven environment like Ghana, the socio-cultural implications are that attention to developing the capacity of indigenous fabrics and dyeing processes will lead to job creation and economic empowerment. There is also the possibility of the development of specialized skilled areas in fabric production, bearing in mind the unique and rich cultural contents of these indigenous fabrics. This will lead to the availability of a variety of fabrics albeit in limited designs to facilitate exclusivity of fashion brands' products. These will lead to reduced pressure on world textile markets.

As already mentioned, designers have the capacity of influencing sustainability at the early stages of design (Koszewska, 2018). As established beforehand, the local fashion producer has the mandate to influence the selection of materials which can go a long way in reducing a fashion brand's environmental footprint of businesses across sectors according to Lehmann *et al.* (2018) However, limitation to appropriate fabric selection is the factor of availability. In the face of fewer options, local producers can innovate through the adoption of strategies.

The production module per the survey also points that 71.4% of respondents are into custom-made, 19.5% represent ready-to-wear, 7.8% are into mass production, and 1.3% are missing responses. Garments are predominantly produced onshore with an 80.5% score, 6.55% offshore, 9.1% producing both onshore and offshore, and 3.9% missing responses. The energy source for local production is generated by electricity accounting for 96.10% and 3.90% for solar energy. Hydro generation of power is sometimes challenged by the drop of water levels, however, considered to be cleaner than crude. Once the garments are produced, they are delivered primarily direct-to- customer with a score of 71.40%, 3.90% selling through own retail outlet, 23.40% employing both direct-to-customer and own retail outlet, 1.30% missing. The analysis is an indication of the heavy emphasis on local production and corresponding consumption. It is worth noting that, the majority of respondents opted for custom-made modules of production, while value is delivered directly to the customer instead of a retail

format as in the case of most developed fashion jurisdictions. In most cases in Ghana, customers will go to their preferred dressmaker to request a garment, usually with their fabrics and personal body measurements accompanied by the customer's choice of style. The sewn garment is then delivered personally to the client who picks it up from the producer's workshop. In the light of this, a well harnessed direct relationship with the customer (Thorisdottir and Johannsdottir, 2019) can be a catalyst for ensuing conversations around sustainable strategies, to identify and adopt the most appropriate, that aligns with the firm and its clients for mutual benefits. The high preference for a custom-made product, coupled with value delivered direct to the customer, and the fact that garments are predominantly produced locally is significant in the implementation of strategies in Ghana. These are enablers that bring the customer to the center for consideration and decisions on implementation, should a firm adopt a strategy. Customer direct engagement is an entrenched production culture that may likely affect the retail model and requires investigation to unearth the dynamics and implications on the adoption of SS.

ITEM	FREQUENCY	PERCENTAGE
<i>FABRIC MOSTLY USED</i>		
<i>Cotton</i>	23	29.90
<i>Polyesters</i>	0	0.00
<i>Both</i>	54	70.10
<i>None</i>	0	0.00
<i>FABRIC SOURCE</i>		
<i>Locally made fabrics</i>	13	16.90
<i>Imported fabrics on open market</i>	19	24.70
<i>Both</i>	44	57.10
<i>Missing</i>	1	1.3
<i>PRODUCTION MODULE</i>		
<i>Custom-made</i>	55	71.4
<i>Ready-to-Wear</i>	15	19.5
<i>Mass Production</i>	6	7.8
<i>Missing</i>	1	1.3
<i>PRODUCTION LOCATION</i>		
<i>Onshore</i>	62	80.5
<i>Offshore</i>	5	6.5
<i>Both</i>	7	9.1
<i>Missing</i>	3	3.9
<i>SOURCE OF ENERGY</i>		
<i>Electricity</i>	74	96.10
<i>Solar</i>	3	3.90
<i>DELIVERY CHANNEL</i>		
<i>Direct-to-Customer</i>	55	71.40
<i>Own Retail Outlet</i>	3	3.90

<i>Both</i>	18	23.40
<i>Missing</i>	1	1.30

Table 3: Factors Impacting on Garment production. Source: Authors

Awareness, Importance, and Practice of Sustainable Fashion

The last section of the survey was to gauge respondents' awareness and sustainable strategies highly applicable to their firms. Hur and Cassidy, (2019) stressed the fact that if a company's vision does not embrace sustainability in its design practice, it becomes difficult to practice it. Awareness of sustainability issues to a fashion producer is critical to the implementation of strategies as it guides the selection of the most appropriate strategy that aligns with a firm's vision. In fig 2, out of the 84 respondents, 7 representing 9.10% indicated they had no idea of sustainable fashion, 6 (7.10%) low on awareness, 31 (40.30%) averagely aware, 23 (29.90%) good, 7 (9.10%) high, and 3 (3.90%) indicated very high. This implies that the majority of garment producers in Ghana know of sustainable fashion. The awareness of the phenomenon is an important step in its implementation.

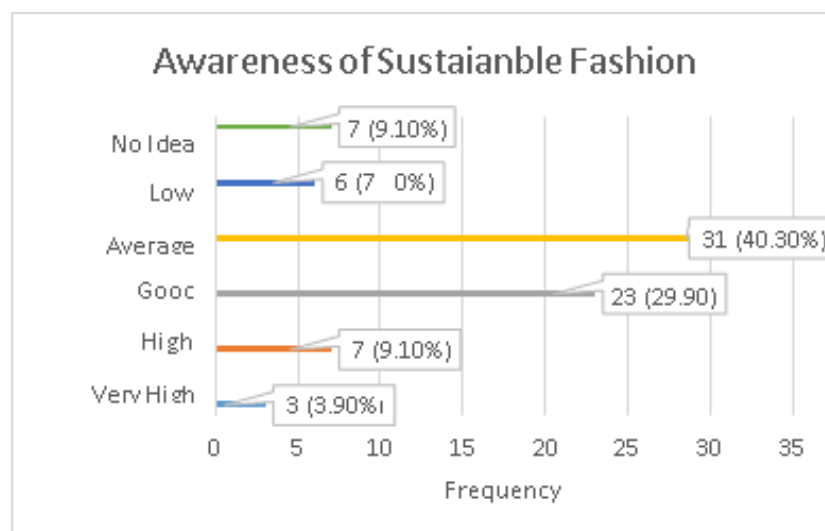


Figure 2. Awareness of Sustainable Fashion among respondents. Source: Authors

Again, based on Hur and Cassidy, (2019) assertion, it can be argued that how relevant one views issues on sustainable fashion craves the willingness to adopt and implement a strategy. In fig 2, out of the 84 respondents, 26 (33.80%) strongly agreed to the importance of issues on sustainable fashion, followed by 27 (35.10%) indicated they agree, 16 (20.80%) were neutral, while 5 (6.40%) disagree, and 3 (3.90%) strongly disagree. The result points to the majority of respondents affirming the importance of sustainable fashion. The majority are aware of sustainable fashion and regard its related issues as important.

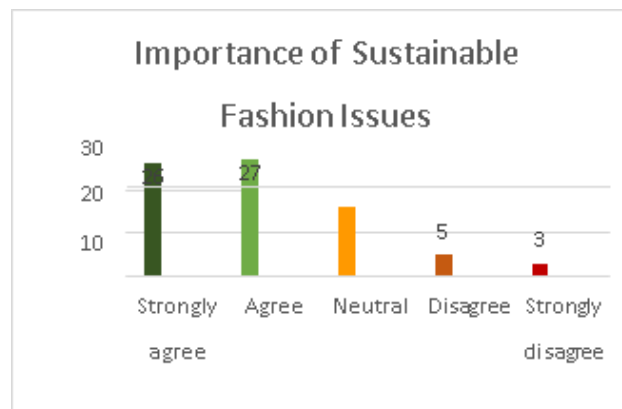


Figure 3. Importance of issues on Sustainable Fashion among respondents. Source: Authors

Although in fig 1 and 2, the majority of the respondents indicated awareness and importance of sustainable fashion and associated issues, when asked to select the highest strategy applicable to their firms in order of priority fig. 4 showcased customization as the most plausible with 26 (33.8%) respondents, followed by 24 (31.2%) in favor of timeless design. Transformable design and Design for longevity both had 5 respondents, representing 6.5% respectively, multifunctional had 3 (3.9%), and design for repair 2 (2.6%). The rest; zero-waste design, slow fashion, redesign/upcycling, emotional durability, design for reuse, design for recycling, all attracted 1 response, representing 1.3% each. However, 6 (7.8) responses were missing.

While there are different classifications of sustainable fashion (Cooper et al., 2013, Gwilt and Rissanen, 2011, Niinimäki, 2013 and 2015, Bocken et al., 2014) some are considered more transformative e.g. Circular Economy (MacArthur, 2010, WRAP 2015), with strategies like; reduce, reuse, recycle. From the analysis, three strategies were prioritized; customization, timeless design, and transformable design. The highest choice for customization as the most applicable strategy, confirms earlier results on production module and delivery channels adopted by these firms in table 3. This practice can be explained by less dominated large-scale firms that produce huge volumes for distribution. Again timeless, longevity and transformable designs as second and third options respectively in the authors' opinion are due to the relatively less trend-driven and season-less production of style. Customers could wear their clothes for a long period, however dependent on garment quality. Based on the strategies prioritized in table 4, Circular strategies appeared less attractive and require a further inquiry to unearth the underlying reasoning for their unattractiveness.



Figure 4. Highest Strategy Applicable to Firms. Source: Authors

Conclusion

The fashion industry globally is on a mission to transition into a sustainable industry. This movement has been embraced by both large, medium, and small-scale businesses. The implantation and scale however vary from company type. Company structure plays a vital role in the implementation of sustainable strategies. Although there is a call for the adoption and implementation of sustainable strategies, there has been the drive towards a circular approach. The structure of the Ghana fashion industry is characterized by micro to small-scale firms predominantly in the informal sector. Studies have shown that implementation approaches adopted by large-scale firms are not applicable in small businesses. Although fashion business owners double as creative heads and producers and therefore will have the mandate to take major decisions regarding their businesses towards sustainability, environmental conditions such as material availability and awareness of material components is an immediate challenge. These perceived challenges may hinder the adoption and implementation of strategies, especially with regards to circular strategies that appeared to be less favored according to the survey. A study into the knowledge of circular strategies and businesses' willingness to adopt these strategies is required. This will unearth the reasons for the disinterest as portrayed by this study and the necessary steps that have to be taken to warm fashion businesses in Ghana into circularity. Koszewska (2018), opines that transition to a circular model will depend on the knowledge, awareness, and engagement of all actors. Ideally, a focus on formal businesses with the necessary operating protocols will be a good starting point in initiating sustainable strategies that could yield a rippling effect on later attempts by informal firms. Although there is a significant drive towards strategies like customization, timeless design, and design for longevity, it is important that further research is conducted to find how these strategies are carried out and possibility align them towards a sustainable manner for greater impact.

However, the direct customer engagement with fashion businesses in Ghana is positive for the identification of customer preferred sustainable strategies and how businesses can align themselves for effective implementation of selected strategies for sustainability.

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