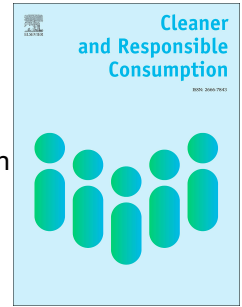


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Design and sustainability in the fashion industry: the example of independent labels in London

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Abstract

The fashion industry is deemed to be notoriously unsustainable. Fashion brands and their multiple stakeholders recognize both environmental and social negative externalities that the industry generates. Fashion capitals like London accommodate innovative fashion businesses, which are expected to be sustainability pioneers. This paper evaluates which sustainability practices fashion brands in London accommodate and whether those with profound investments in sustainability achieve superior attractiveness to the customer. The research is based on data collected for 158 fashion brands. The database includes evaluations of environmental and social sustainability provided by the 'Good on You' platform and such characteristics as brands' affiliation with high-end design and the number of followers on Instagram as an indicator of their attractiveness to the customer. Analysis of data led to the typology of brands in London. Findings indicate that only one-third of researched businesses seriously place sustainability at the center of their business models. Even these attempts have not led to drastic changes in London's fashion industry outlook. Most successful in terms of sustainability firms are not associated with 'high-end' fashion. Customer appreciation is only sometimes on the side of sustainable firms. Policymakers and practitioners can use the results as a guide for a more critical appraisal of developments in sustainable fashion.

Keywords

Design, sustainability, fashion industry, London

Introduction

The fashion industry in the UK is an integral part of the economy, contributing to GDP and jobs in retail, manufacturing, and design occupations (UKFT, 2023). London remains one of the most influential fashion capitals of the world (Casadei et al., 2021; Gilbert, 2019; Godart, 2014; Jeong et al., 2021; O'Barne, 2009) with the industry contributing £11 billion in GVA and sustaining 20 000 jobs in 2021, 12 000 of which are in product development and design (UKFT, 2023). London concentrates the highest in the country proportion of high-value-adding pre-production activities such as design and processes of commercialization, endorsed by a high-density institutional environment represented by media, fashion weeks, consultancy, marketing, PR activities, world-renowned fashion colleges, and supporting industry organizations. A small number of 'cut, make, and trim' (CMT) businesses materialize symbolic value designers create into samples and collections. London retail and wholesale operations deliver value to customers. Organizations labeled 'scavengers' and 'decomposers' (Bals et al., 2022; Shah and Bookbinder, 2022) reconstruct value from the waste clothes, contributing to the circular economy (Sandberg et al., 2018). All these firms and organizations, along with sophisticated London customers, create a symbiotic ecosystem (Bals et al., 2022; Vargo et al., 2008) and can be seen as co-producers of fashion products' value. London fashion brands have always been pioneers of innovation in high-end design. Creating and controlling symbolic value are the main points of their competitive advantage. Symbolic attributes relate to premium quality, craftsmanship, complexity, uniqueness, rarity, variety, innovation, and brand reputation (Caniato et al., 2009, 2011). They are also attributed

to place ("Made in London"), authenticity, fairness, and sustainability (Caniato et al., 2012). Brands caring about environmentally friendly cultivation methods of the used raw materials or special provisions for socially disadvantaged groups involved in this cultivation or further production of textiles and final products build their symbolic sustainability value and contribute to their branding package (Daviron and Ponte, 2005; Jung and Jin, 2014; Palomo-Lovinski and Hahn, 2014; Ponte and Daviron, 2011; Slater, 1997). London brands work on perfecting sustainability value - both material and symbolic (Jung and Jin, 2014; Pal and Sandberg, 2023; Sandberg et al., 2018; Shah and Bookbinder, 2022). This paper attempts to understand how successful this work in progress is.

The fashion industry is characterized by overproduction and overconsumption. It is reliant on non-renewable resources and characterized by vast amounts of waste and carbon emissions, high water usage and pollution, and the release of plastic microfibers into the ocean (Bailey et al., 2022; Ellen MacArthur Foundation, 2017; HC, 2019; Kant, 2011; Slikker, 2021). The linear 'take-make-waste' model results in an annual loss of US\$460 billion in value (Ellen MacArthur Foundation, 2017). The problems with social sustainability, such as forced and child labor, long hours, and low pay, are also perpetuated (HC, 2019; Henninger et al., 2016). Distribution of negative externalities, however, is asymmetrical (Bair and Gereffi, 2003; Gereffi and Memedovic, 2003; Rossi et al., 2014) and follows the geography of upstream internationalization and offshoring of low-value-adding activities (Mudambi, 2007). That division of labor favors the developed parts of the world or, more precisely, global fashion capitals, particularly London. However, here too problems exist such as poor work conditions, failure to pay the national minimum wage, inability to develop sustainable or heritage sources of raw materials, and finding local sustainable producers (Henninger et al., 2016).

Value chains in the fashion industry have been described as designer-driven (Khan et al., 2012). Indeed, the fashion product's value creation journey, both material and symbolic, starts with design, with a sketch on 'the drawing board', where the product is conceived and developed (Appelqvist et al., 2004; Krishnan and Ulrich, 2001). The chosen product design determines the value system architecture, set of local and global actors and stakeholders involved (suppliers, manufacturers, laborers, customers, and intermediaries, NGOs, and governments), and dynamics of flows of information (including the response of stakeholders to negative externalities), (semi-) products (how they are produced, cared for, and then discarded), money, and the character of associated labor (Bhamra and Lofthouse, 2016; Esty and Winston, 2009; Lo and Power, 2010; MacCarthy and Jayarathne, 2013; Pero et al., 2010; Palomo-Lovinski and Hahn, 2014; Stavroulaki and Davis, 2010; Thackara, 2006). High-value-adding activities, allegedly, do not generate many negative externalities and, yet, are the ones that represent the sustainability culture of organizations and are responsible for the pre-and post-use life of fashion products as well as particularities of sustainability management of value creation (upstream stages, up the value hill), value use, and value preservation and reconstruction (down the value hill of the circular model) (Achterberg et al., 2016).

Activities described above form the aspects of 'sustainable design' (ARUP and Oxford Economics, 2023; Gwilt, 2012; Gwilt and Rissanen, 2011). In more detail, this includes anti-consumption marketing and developing and propagating less wasteful philosophies, e.g. of 'slow fashion'; durability, longevity, and re-manufacturability of the products and materials; upcycling, reuse, remaking and recycling – all relate to the closed-loop supply chains or 'circular economy'; cruelty-free practices concerning animals; leather alternatives, organic cotton, plastic-free packaging; water and energy saving practices, environmentally friendly

dyes; development of procurement strategies and product's life cycle analysis; sweatshop-free labor and anti-slavery; localization of production in the country of origin or nearshore; transparency of the supply chain and openness with customers (Fletcher, 2010, 2013; Jung and Jin, 2014, 2016; McDonough and Braungart, 2010; Mukendi et al., 2020; Ozdamar Ertekin and Atik, 2015; Palomo-Lovinski and Hahn, 2014). This paper attempts to determine which of these principles and practices fashion brands in London accommodate.

Observers argue that all three 'intimately' interrelated aspects of sustainability - environmental, social, and economic - should be considered in concert. However, definitions, interdependencies, and measurements of elements constituting sustainability remain vague and contradictory (ARUP and Oxford Economics, 2023; Fung et al., 2020; Moraes and Tivanka, 2020; Mukendi et al., 2020;). Different parties and stakeholders identify sustainability differently depending on their size, positioning, and responsibilities in the value system (Thomas, 2020). Moreover, both social and environmental negative externalities often cannot be easily decoupled from positive economic growth, or, on the opposite end of the spectrum, the agenda of environmentalists cannot easily accommodate the growth and profit most companies pursue to achieve (Barendregt and Jaffe, 2020; Zudin, 2020). This triggers the question of whether brands with profound investments in sustainability can be commercially successful.

This paper explores whether sustainable design is typical of fashion companies in London and attempts to align aspects of sustainability with characteristics of broader value systems (Bals et al., 2022) typical of the London fashion industry (ARUP and Oxford Economics, 2023). There is an attempt to compare luxury or high-end and sustainability attributes of value. The combination of factors described above directed the research towards brands and labels based in London, representing the broad spectrum of attitudes and practices concerning high-end design and sustainability. Particular attention is paid to the designer labels that epitomize innovation and creativity and are expected to be sustainability leaders.

The rest of the paper is structured as follows: literature is discussed in the next section, then the methodology is described; then the results are represented and discussed, and, finally, the concluding remarks are drawn.

Literature

The symbiotic ecosystem of the fashion industry is well-researched from different angles. According to De Brito et al. (2008), this ecosystem includes such stakeholders as suppliers (fibers, machinery, and chemicals); manufacturers (clothing and textiles); retailers and wholesalers; post-use actors (e.g., operating in the second-hand market); service providers (press and industry associations), and independent experts (scholars). Sarkis (1995) included a customer as an essential part of the ecosystem. In contrast, Sandberg et al. (2018) developed an understanding of the reverse clothing supply chain and added several participants to the post-use side of the ecosystem. Vargo et al. (2008) divided the ecosystem into 'servicing' sub-systems considering the importance of the interface between the firm's and customer's ecosystems. Caniato et al. (2012) emphasize the importance of product, process, and supply chain design, which are at the core of the value creation. None of the above explicitly located the designer, as an orchestrator of the value creation, into the center of the ecosystem. This paper attempts to shed more light on the cardinal role of the designer. Three theoretical standpoints explain in conjunction how the ecosystem's internal and external business environments interact; they are stakeholder theory, institutional theory, and resource-based

view (Allen et al., 2021). The servitization theory (Vargo et al., 2008) also proved helpful as it provides a better explanation for the complex relationship between fashion firms and customers.

Designer ecosystem

In London, designing activities and high-end designer-led firms are at the core of the fashion industry ecosystem and are responsible for the most value creation. Products in the fashion industry are located on a utilitarian-luxury or functionality-symbolism 'continuum' (Berthon et al., 2009). High-end designer goods are characterized by high experiential and symbolic (aesthetic) values (Peltoniemi, 2014) and rarity but also by high imitability. According to the resource-based view, these characteristics are sufficient for a firm to have a temporary competitive advantage and a chance to overtake the competition. In London, however, few designer-led start-ups grew into sizable brands. Authors suggest that functional, symbolic, and experiential value not only differ from firm to firm and that the balance between the trio changes over time and along with the varying circumstances, but they also played different roles historically with functionality most important in the 19th century, symbolism - after the WWII, and experiential value - in modern time (Berthon et al., 2009). The same authors suggest that new values emerged after the recession of 2008, particularly those of ecology and nature. However, only a few fashion brands have adopted sustainable practices, and a limited number of altruistic customers represent a niche market for sustainable products (Beard, 2008a; Palomo-Lovinski and Hahn, 2014).

Though the internal designer capabilities of the firm are essential, the primary (real) value embedded in the product of a designer-led firm is co-created in conjunction with other employees of the firm, media, government agencies, financing organizations and companies, suppliers of materials and manufacturers and customers, but any exchange (and exchange value) is determined by customer (Vargo et al., 2008). According to stakeholder theory, all these participants have different levels of legitimacy, ranks of power, and degrees of their message's urgency. It is the characteristics of and the relationships within this more extensive system, not singularly those within the firm, that can provide clues to the potential of the growth or decline of the firm.

The developed body of literature suggests that sustainable fashion firms are expected to address the sustainability issues in their entirety: on the path of value creation ('take' and 'make', pre-use), value use and maintenance, and implementing the ideas of the product's post-use ('waste') – its disassembling and remanufacturing (Palomo-Lovinski and Hahn, 2014). However, definitions and measures of sustainability up and down the value hill represent contradictions that forbid overall sustainability and allow only trade-offs. Literature suggests that design for durability, for example, serves the agenda of 'narrowing and slowing' the resource flow (Bocken and Short, 2016; Bocken et al., 2016; Pal and Gander, 2018). However, durable materials (Claxton and Kent, 2020) are complex products with blends of components involved, e.g. cotton and polyester, that prevent disassembling and remanufacturing and, therefore, do not serve well the purpose of closing the loop of the resource flow, which is another purpose of sustainable design (Bocken and Short, 2016; Bocken et al., 2016; Pal and Gander, 2018). Durability also limits the flow of used products back into the system and prevents businesses from developing post-use models.

Using low-impact raw materials (Niinimäki and Hassi, 2011) is typical of sustainable fashion. However, the optimal 'green' material is not found yet, as the production of organic cotton still requires large amounts of water, and it is grown in countries with low protection of

workers' rights; choice of mono-material and exclusion of artificial fibers from designs reduces comfort and longevity of the fashion products, e.g. pure cotton is less durable than cotton-synthetic blends. Using other renewable sources, such as orange peel or pineapple leaves, for example, represents technological and sourcing problems. Fabrics considered suitable for the environment, such as organic cotton or bamboo, are not significantly better than the fabric they are meant to replace (Karpova et al., 2021; Palomo-Lovinski and Hahn, 2014). Innovation of new materials to replace, e.g. unsustainable natural leather, is facing a challenging phase. Observers conclude that new materials also contain damaging components, and production infrastructures are weak and economically unsustainable. Production of Mylo by *Bolt Threads*, California, US, a mushroom-based leather alternative, is paused despite the vital interest of such companies as *Stella McCartney*, *Adidas*, *Lululemon*, and *Kering* (BoF, 2023). Production of new materials manufactured in small quantities and only in a few places challenges the sustainability principle of 'localism', which requires keeping a short distance between resources, production, and use to reduce the damaging environmental effects of transportation. Requirements of reliance on renewable resources often contradict agendas of animal rights protection when synthetic materials replace fur, down, and leather. Fletcher (2013), and Reiley and DeLong (2011) emphasized that designer orientation on eco-organic fabrics and utilizing local or fairtrade production could be seen only as the initial steps toward sustainability (Palomo-Lovinski and Hahn, 2014).

Design for aesthetic longevity or 'emotional' durability (part of the symbolic value) includes a range of approaches, such as the promotion of fashion collections that are less trend-driven, classical, more seasonally adaptable and versatile in terms of fit and styling, and based on the materials which age well (Chapman, 2012; Claxton and Kent, 2020; Fletcher, 2012, 2013; Niinimäki and Hassi, 2011; Thomas, 2020). Authors suggest that smaller, high-end brands are well-positioned to succeed in a durability strategy related to their brand identity (Claxton and Kent, 2020). However, this pushes sustainable fashion towards luxury fashion and can be criticized for being 'elitist' (Deely, 2023) or a 'luxury niche' (Beard, 2008b). Authors observed the controversial positioning of high-end and luxury fashion when considering sustainability in general (Athwal et al., 2019; Mukendi et al., 2020). On the one hand, luxury is "*uncompromisingly extravagant in terms of effort and material*" (e.g. silk, leather) and associated in its values with personal gratification, in opposition to sustainable consumption linked to moderation and ethics (Athwal et al., 2019, p. 405). On the other, luxury "*is synonymous with skill, quality and endurance, which may be easily aligned with sustainability*" (Athwal et al., 2019, p. 406). Luxury fashion, from its conception, prioritizes local producers ('Made in ...'). It maintains slow craft or small batch production; it is oriented on a small number of unique products (exclusivity) with the use of local resources and labor (localism) and often traditional techniques (authenticity); it requires more time for each piece of clothes and primarily excludes the possibility of outsourcing as required by 'slow fashion' philosophy (Castagna et al., 2022; Cline, 2013; Jung and Jin, 2014). Emotional durability and high quality are a part of luxury companies' branding and sustainable companies' ethos alike. However, the logic of the luxury fashion industry's traditional and institutionalized business model based on introducing new collections at least twice a year goes against adopting sustainable designs (Macchion et al., 2015; Niinimäki and Hassi, 2011). These controversies can lead to uncertainties in defining which high-end companies are sustainable and which are not, as possible to see comparing credentials of *Burberry* and *Stella McCartney*, for example. Design value is different from sustainability value. Aspects of design – quality, cut, material, and color - are visible, touchable, and naturally recognizable entities, whereas sustainability value requires explanations, special labeling, and knowledge to be appreciated. The symbolic value of the designer brand built over time is

linked to the price and appreciation of interested customers. There is a well-established system of designer value creation and delivery. In contrast, recognizing and appreciating sustainability symbolic value requires additional knowledge and education. Sustainability value often stays invisible and does not readily form additional competitive advantage. Design and sustainability values cannot be easily amalgamated.

London labels are firmly embedded in robust institutional networks, which cultivate and maintain the definitions, requirements, and standards for symbolic design and sustainability value creation. Embeddedness is maintained by established routines such as participation in Fashion Weeks (FWs) and allocation of financial grants, surrounded by fierce competition. Grants are assigned by stakeholders with substantial power - the British Fashion Council (BFC) and large domestic or foreign brands, e.g. *Topshop* and, later, *Farfetch* (Lau, 2023). One is NEWGEN, devised to help talented young designers create their first collections. Requirements for receiving a NEWGEN grant include high quality and originality of design, evidence of salability (proof of wholesale contracts, active e-commerce, and presence on social media), and sustainability credentials (BFC, 2023). These requirements mirror the 'triple bottom line' and signal the ethos of the industry, which is oriented on high-end design, commercial value, and sustainability. Fashion colleges also have dedicated 'sustainability' courses. Evaluations and control from various other stakeholders and the networks' members reinforce embeddedness: fellow designers and competitors, interested retailers (*Selfridges*, *Liberty*, *Farfetch*, and *The Dover Street Market*), fashion media (*Vogue*), and organizations, follow high-end designers on social media (Gornostaeva, 2023).

Designers who presented their collections at London Fashion Week are a vanguard of fashion design innovation and are located closer to the center of the ecosystem of selectors, buyers, intermediaries, and legitimizers that provide them with additional comparative advantage in relation to other entrepreneurs in the sector. They are a group that is most prone to success and to the adoption of progressive business models. On the other hand, embeddedness may reinforce conformity rather than risk-taking and innovation.

There is a controversy, though, regarding the direct and 'loop' effects of industrial 'protectionist' interventions, such as financial grants designed to support only high-end fashion designers. Sustainable businesses are unable to obtain reasonable investment. Not all fashion businesses can be involved in and endure the 'display' cycle via FWs, as this depends on available funds and agreeable selectors (McRobbie et al., 2019). Nevertheless, the correlation between grants and success is non-linear. Many high-end designers lose their business soon after the grants' flow expires. There is evidence, that those not supported financially by external bodies can gain the advantage of becoming more entrepreneurial, commercially oriented, and resilient (Klaver, 2010).

Embeddedness also manifests itself in the production realm, as designer labels in London often sub-contract CMTs for manufacturing that warrants them a sustainability credential of 'localism' – a short distance between the designer and producer. CMTs follow the designers' requirements and, seemingly, have a limited scope to dictate the independent sustainability agenda apart from attempts to reduce their own waste and energy use, which entails not only sustainability but also reduction of costs. However, CMTs operate on low-value-adding logic of small margins and large volumes and are engaged with a vast spectrum of customers, including unsustainable 'fast' fashion brands (e.g. *ASOS*), which offer more significant contracts and higher financial security. The latter gives CMTs more bargaining power over designer labels, especially start-ups, confirming that designers and manufacturers belong to

different organizational fields and that a cognitive distance exists between them (Gornostaeva et al., 2014; Karra, 2008).

London designers' ecosystem is far from being exclusively local. Most designers seek to present their collections at the more prestigious Parisian Fashion Week; they sell to foreign buyers (e.g. *Nordstrom*, US) as the regional market is saturated, and produce in the regions of the UK beyond London and South East, e.g. in Leicester with its notorious reputation of low labor standards (BBC, 2018; Commons, 2019; Henninger et al., 2016), and in foreign countries, mainly in Italy, Spain, Portugal, Turkey, and Eastern Europe (nearshoring). Many designers produce offshore, in distant countries of their origin, e.g., China, using their previously established connections, where aligning with sustainability requirements is difficult (Gornostaeva, 2023).

Consumers as co-producers of sustainable fashion

In London, high-end independent designers are oriented toward cosmopolitan and sophisticated customers, the group that can afford high prices and appreciate high-end design. Consumers are regarded as one of the most legitimate and powerful stakeholders responsible for change within the fashion industry (Allwood et al., 2006; Palomo-Lovinski and Hahn, 2014). Authors argue that there is a connection between customers' financial, social, and educational status and their preferences for items produced and sold sustainably (Amatulli et al., 2020; Bellezza et al., 2017; Castagna et al., 2022; Palomo-Lovinski and Hahn, 2014; Volonté, 2012). The upsurge in Eco-Chic or green consumption, being the last decade's trend (Black, 2011; Bryant and Goodman, 2020; Jahangir and Akther, 2023), is associated with the growing prominence of lifestyles and preferences based on moral concerns for local, natural, environmentally friendly and artisanal goods (Barendregt and Jaffe, 2020). Environmental consciousness has become a new status symbol (Amatulli et al., 2020; Castagna et al., 2022).

In London, some specific groups represent 'critical, hedonic and recreational' motivations and authentic experiences of consumption (Ferraro et al., 2016; Guiot and Roux, 2010; Thomas, 2020) and tend to demonstrate *ostentatious poverty* (Urry, 1990). They would lean towards eco-designs, organic or recycled materials, and vintage clothes, engaging in the 'sharing economy' and environmental activism (Goworek et al., 2012; Heinrichs, 2013; Hoor, 2022; Thomas, 2020). They are younger or middle-aged urban middle-class professionals, many are cosmopolitan gentrifiers residing in well-known 'hipsters' areas of London such as Camden, Shoreditch, and Clerkenwell - 'hipster East End' (Gurova and Morozova, 2018; le Grand, 2020; Machell, 2014; Redi et al., 2018). They are skeptical of fast fashion brands and their greenwashing and consumption in general (Balsiger, 2014; Bly et al., 2015). Many practice veganism, potentially associated with sustainable fashion, especially with the movement against animal cruelty and for animal rights (Niinimäki and Hassi, 2011; Ochoa, 2010; Volonté, 2012).

In London, however, consumers are socially polarized, favor varied fashion styles and price ranges, and hold different consumption, disposal, and sustainability values. The scholars of fashion cities often ignore this fact. The numbers of those identifying as 'pioneers of sustainability' in London correspond with the proportion of professionals, which is 30% (23% for Britain) (NOMIS, 2023). That means most consumers are not associated with sustainability values, even in cosmopolitan London. For this low-income stratum with purely economic motivations, consuming in fast fashion, low budget or charity shops is a grim necessity (Ferraro et al., 2016; Guiot and Roux, 2010). It is revealing that most of the population in the UK buys clothes from fast fashion brands such as *Primark*, *M&S*, *Next*, and

ASOS (Statista, 2020). Some (e.g., *M&S*), though, have recognizable sustainable practices (Claxton and Kent, 2020; Earley, 2017). However, their sustainability strategies focus on the product, materials, and production stages for the core volume lines, where their competitive advantage is mainly achieved (Claxton and Kent, 2020). These brands mainly produce abroad (Statista, 2021, 2023).

Authors argue that though a wide range of consumers may be aware of sustainability issues concerning workers' rights, fair trade, or environmental damage, these become secondary if they sharply contrast with price, quality, and style, with price being the primary challenger for sustainable fashion (Castagna et al., 2022; Deely, 2023; Joergens, 2006; Mandarić et al., 2022; Niinimäki, 2010; Nilssen et al., 2019; Ochoa, 2010; Palomo-Lovinski and Hahn, 2014; Ritch, 2015; Wang et al., 2022). The customer surveys in the UK also suggest that the price mainly determines most customers' purchasing choices (Statista, 2024). Fast fashion, controversially, being more democratic and affordable, can be seen as a more 'socially sustainable' consumption option than more expensive eco-designs or vintage clothes (Deely, 2023).

Sustainability and commercial success

There is controversial evidence of a correspondence between the sustainable performance of the firm and its financial achievements (Medcalfe and Miralles Miro, 2022). It is too complex to be fully sustainable and commercially successful simultaneously. Sustainable products in London serve only the niche affluent customer attached to a new symbolism of sustainability (Deely, 2023). This limits the customer base of sustainable brands, and many, especially newly established ones, are in danger of not generating profits and being economically unsustainable. Sustainable designing requires new business models and changes in sourcing, manufacturing systems, types of marketing and sales, customer service, and logistics (Fuad-Luke, 2013; Niinimäki and Hassi, 2011). Sustainability considerations add to the price of materials and increase transaction and information costs as designers navigate a changing and increasingly demanding world of new legislations, technological innovations, and a developing field of active and influential stakeholders. There are also infrastructural obstacles on the post-use side, which make post-use collection and remanufacturing models expansive and challenging. When a product and its residual rights are transferred by the 'creator' into the ownership of the customer, who can not only use it but also sell, destroy, and dispose of it (Malone, 2006), the chain of control over the value is interrupted, and brands have limited power to oversee the reuse, recycling, and remanufacturing of products. Completely different businesses and public sector organizations, traditional and new, pick up the remaining fragments of value and invest in its reconstruction. It should be noted that only 1% of the textiles in the UK are collected in stores; the rest is collected by charity shops (48%), and other intermediaries (Statista, 2019). Moreover, only half of the used clothes are in the reuse and recycling collections; out of these, only 1% is recycled into new clothes due to issues including material quality and availability of technology for textile-to-textile recycling (Black et al., 2019; WRAP, 2019). London brands struggle to find remanufacturing and recycling facilities in the UK. Some observers connect poor clothing and textile recycling practices with the disappearance of a solid manufacturing base in the UK, with much better practices, e.g., in Italy and Portugal.

Local production as a premise of slow fashion is possible only for micro-craft-based businesses ('cottage economy') as any attempts to scale up face the limits of regional and national production bases and appropriate skills and eco-materials shortages. Moreover, as a

business ideology, slow fashion prevents economies of scale, lowering efficiency and options for making reasonable profits (Jung and Jin, 2014). This, in turn, makes businesses vulnerable to economic shocks and competition from larger and more established competitors, leading to high business death rates (Doeringer and Crean, 2006; Jung and Jin, 2014; Rantisi, 2002).

A list of challenges faced by fashion brands when trying to embed sustainability value creation in their business models includes the lack of standards to access sustainability performance, cost and quality of sustainable materials, limited control over extended value chains, insufficient budget to invest in sustainability and, above all limited ability to influence consumer preferences towards sustainable fashion and elevate customers' perception of brands' sustainability credentials (Black et al., 2019).

Some challenges relate to general issues of competition between new entrants, which suffer from the liability of smallness, newness, and 'outsidership' (Johanson and Vahlne, 2009) in a well-developed, mature industry such as fashion and include disadvantages in comparison with larger companies on issues of price, differentiation, efficiency, and resource availability. Literature on sustainable entrepreneurship classified firms according to their attitudes and strategies toward sustainability and profit (Halder, 2019; Walley and Taylor, 2002). The group which tried to achieve both and found business on the principles of sustainability was labeled 'innovative opportunists' or 'ecopreneurs'. Their business orientation is formed by economic incentives and demands, government regulations, the tastes of consumers, and internal motivation to achieve economic gains (Halder, 2019). 'Ethical mavericks', on the other hand, also have a sustainability orientation, but are driven by such factors as past experiences, family and friends, education, and personal networks. The latter type of entrepreneur operates small businesses outside the mainstream industry (Halder, 2019). Concerning social sustainability, Halder (2019) identifies a 'successful idealist' as an entrepreneur with a desire for profit and for 'changing the world' and creating 'social value'. These classifications, however, are based on the opinions of entrepreneurs and do not compare their intentions with their sustainability performance and profitability.

Research design and methodology

The literature inspected above confirms the complexity of the fashion ecosystem in London. Though research on sustainable fashion is vast, publications considering both environmental and social aspects of sustainability for both large established international brands and smaller companies in the same location are limited. Moreover, research linking sustainability value creation with design value creation and their relation to commercial success expressed in maintaining the stream of exchange value between fashion labels and their customers is also scarce. Literature also confirms the vulnerabilities and controversies, that sustainability value creation imposes on brands, especially on start-ups. Trying to fill some of these gaps the paper introduces a methodology that provides a snapshot of the changing mosaic of London brands having different design credentials and adopting sustainability practices to a different degree. The attempt is made to evaluate the differences in the contribution of fashion brands in London to their design and sustainability values and understand if either profoundly increases their attractiveness to the customer, or improves their chances of success. Informed and supported by discoveries in literature, which mostly provides qualitative insights, the present paper explores quantitative data to answer two research questions:

1. Where do fashion brands in London stand and how do they differ in terms of their design and sustainability credentials?

2. How attractive to the customers are the design-led, sustainability-led, or both design& sustainability-led fashion brands in London?

Choice of methods.

Most of the previous research in the field of the fashion industry used an inductive methodology and exploratory qualitative methods (e.g. Caniato et al., 2012; Haldar, 2019). Research in this paper does not stretch to the development of theory and does not ask the question ‘Why?’. Instead, it is directed at improving, confirming, and generalizing the knowledge about the fashion industry that corresponds more with a deductive approach and the choice of quantitative methods (Bell et al., 2022). Though the author conducted several in-depth interviews with fashion designers, manufacturers, and other stakeholders on the up-the-hill side of the value system over the last 10 years, they are not a part of this paper. Nevertheless, they informed the understanding of collected quantitative data and served for ‘triangulation’ (Heale and Forbes, 2013) when deciding on the final classification presented below. For the same purposes, various secondary qualitative sources were used, such as companies’ websites’ content, industry reports, and articles in the industry press.

Many researchers follow the route of quantitative methods exploring the fashion industry (see for example Scuotto et al., 2017, though with different research questions). The exploration of this avenue led to the realization that a survey cannot be a method of choice, as industry members are notoriously difficult to approach, and they also can be secretive, especially about the state of their finances. Therefore, the author had to succumb to the exploration of published secondary sources and collect data that would relate to sustainability, design potential, and performance of the fashion brands in London. The author strived to collect as much quantitative information as possible to explore whether multiple but fragmented qualitative insights from the literature can be translated into numbers and correlations. This exploration led to several discoveries which formed the final design of this research. They are problems with evaluating sustainability, difficulties in obtaining data on the economic success of the firm, and ambiguity in defining high-end or luxury fashion.

Problems evaluating sustainability.

Sustainability measurements are often a composition of environmental, economic, and social sustainability measurements, which makes them interdisciplinary composite measurements (Brink et al. 2020). There are multiple evaluations of fashion brands’ sustainability to choose from, however, they cover only a limited number of large global companies and do not extend to small- and medium-sized enterprises (Moraes and Tivanka, 2020), which the London fashion industry is mostly composed of. The indices could also be ambiguous (Moraes and Tivanka, 2020). For example, *the Transparency Index* is calculated exceptionally for large companies (FR, 2023). *The Ethical Fashion Report* (Medcalfe and Miralles Miro, 2022; Sanders and Mawson, 2019) also provides indices for large brands globally using such characteristics as policies, transparency and traceability, supplier relationships, worker empowerment, and environmental management. Controversially, in this evaluation, Patagonia and Zara rated equally high on sustainability despite the former being the leader in sustainability innovation and the latter being a symbol of fast fashion. Measurements of environmental and social sustainability can be based on subjective

evaluations, and measurements of economic sustainability can be absent altogether (Cirella, 2014).

The platform *Good on You (GoY)*¹ provides a partial escape from the mentioned problems, therefore it was chosen as a data source for this research. It evaluates a significant number of brands of various sizes worldwide. That allowed to collate data for a region, in our case, London. GoY chooses for their evaluations brands with the largest market share, that are likely to rate highly on sustainability, cater for diversity, and those requested by partner retailers and GoY users (GoY, 2023). GoY evaluated up to 1,000 data points across over 100 key issues and indicators (GoY, 2023). *GoY* uses public reporting and third-party indices (e.g. the Fashion Transparency Index) certifications and accreditations (Fairtrade, Cradle to Cradle, the Global Organic Textile Standard) (GoY, 2023).

For *environmental sustainability*, *GoY* considered companies' greenhouse gas emissions, water use, impact on biodiversity, microfiber pollution, deforestation, chemical use, and disposal, use of resources and waste management, product durability, the sustainability of their business model, including their commitment to circularity, and their textile waste practices (GoY, 2023). Though this list is comprehensive, the juxtaposition of pre-use and post-use sustainability models is not clear-cut. Therefore, for this research, we found it valuable to add such characteristics as the use of innovative materials (new alternative materials, recycled materials) and an indication of the post-use business models (collection of pre-loved fashion items, reselling, upgrading unsold items, activities leading to remanufacturing, etc.). This data was obtained via analysis of individual websites of the labels.

Concerning *social sustainability*, *GoY* looked at policies and practices related to labor, such as child and forced labor, workers' safety, unionization, gender equality, diversity, payment of a living wage, empowerment of workers, supportive supplier relationships, and conduction of meaningful audits (GoY, 2023). The third parameter was *animals' welfare*, which can be considered a particular case of protecting the environment – protection of fauna. It evaluates the companies' provisions, such as cruelty-free practices and vegan fashion (GoY, 2023). *GoY* also provides the index of total sustainability (ITS).

For the complete methodology used by *GoY* for creating the indices read their description on <https://goodonyou.eco/>. As with many other index-based evaluations, *GoY* uses mostly data published by companies under investigation and does not involve the evaluation of economic sustainability and the commercial success of individual companies.

Difficulties in obtaining data on the economic success of the firm.

The fashion industry is poorly represented in available official statistical sources and databases (ONS, FAME, etc.). For example, the performance and success of designer firms are more difficult to measure than those of other cultural entrepreneurs: first, because firms are small and do not report their turnover or the number of employees; second, UK industrial classification counts fashion designers together with other designers, and small independent designers-retailers with all other retailers (Creigh-Tyte, 2005; Jones et al., 2015; Pratt, 1997; Stewart and Kamins, 1993). This research, therefore, explored alternative sources of

¹ Good on You [<https://goodonyou.eco/>] is a fashion brand ranking system, which uses information from the brands' own reported data and certification schemes to rank brands.

information and used indirect indicators of performance, such as the visibility of firms on social media.

Platforms such as Instagram, Facebook, and Pinterest provide opportunities for marketing and trade if the 'buy button' option is selected. The number of followers indicates the interest of customers and their potential role as buyers. Brands' visibility on Instagram (number of followers) can be used as a proxy for their commercial success in the absence of data on profits, turnover, and the number of employees (Ennew et al., 2005; Gornostaeva, 2023; Guercini and Runfola, 2015; Vaughan, 2012).

Ambiguity in defining high-end or luxury fashion.

Products in the fashion industry are positioned on the 'symbolic-materiality' scale (Berthon et al., 2009), however, identifying precisely where designer products are in relation to this scale is difficult. One obvious indicator is designers' participation in FWs, and another - is the education of the principal designer obtained from one of the London fashion colleges. The price range of brands' products also signals the position on this scale: more expensive products belong to the upper end of designer fashion. Another measure of belonging to high-end fashion is a display of the label's products on e-commerce platforms *such as Farfetch* and *Net-a-Porte*, which accept products only from exceptional designers. The latter can also indicate some level of success in the commercialization of designers' products.

Sample.

The exact number of fashion designer labels in London is unknown. However, it is known that in the UK approximately thirty designer/wholesale labels try to enter the market every year (DCMS, 2013. Older data (1997) indicated that there were 280 designer enterprises in the country with 80-85% of them being based in London (DDCMS, 1998). Some previous estimates suggest that there are more than 500 designer fashion businesses in London at present (Gornostaeva, 2023), though this includes only designer-led brands.

The sample researched in this paper is a sample of convenience (Bell et al., 2022; Nikolopoulou, 2023) and is limited to London brands for which *GoY* provided data in 2022-2023. Because the research did not involve any respondents there is no bias in the research. The size of the sample also suggests that a wide variety of companies were included. After the assemblage of the data, large fast fashion companies such as *M&S* and *ASOS* were excluded from the analysis as that would obscure the results. However, credentials for these two brands along with some other fast fashion brands are demonstrated later in the paper as they are the most popular among the buyers in the UK. The final database in this research consists of 158 brands that represent both high-end and mainstream fashion.

The final set of data.

The data, which could be systematically extracted from the above sources for all of the selected designers includes:

- Environmental sustainability index: 1 – To Avoid; 2 - Not Good Enough; 3 - It is a Start; 4 – Good; 5 – Excellent (extracted from *GoY*)
- Social sustainability index: 1 – To Avoid; 2 - Not Good Enough; 3 - It is a Start; 4 – Good; 5 – Excellent (extracted from *GoY*)

- Animal welfare sustainability index: 1 – To Avoid; 2 - Not Good Enough; 3 - It is a Start; 4 – Good; 5 – Excellent (extracted from *GoY*)
- Total sustainability index: 1 – To Avoid; 2 - Not Good Enough; 3 - It is a Start; 4 – Good; 5 – Excellent (extracted from *GoY*)
- Innovative materials used (examination of individual websites of the labels, 2023): yes -1, no - 0
- Post-use business models used (examination of individual websites of the labels, 2023): yes -1, no -0
- Designer-led firm: yes, no (examination of individual websites of the labels, 2023)
- Designer educated in London's Fashion Colleges (examination of individual websites of the labels, 2023), yes -1, no -0
- Brand presented collection on the LFW: yes, no (examination of FW website for last 20 years): yes -1, no -0
- Selling on Net-a-Porte 2023, May-June: yes -1, no -0 (examination of Net-a-Porte website)
- Selling on Farfetch 2023, September: yes, no (examination of Farfetch website)
- Visibility on social media (VSM). The final data set includes data for the number of followers on Instagram; for the final analysis, groups were created with 4 - high, 3 - average high, 2 - average low, and 1 – low numbers of Instagram followers; the original absolute numbers were used in tabulations. The data in the paper is correct for 2023 (extracted from Instagram)

To the author's knowledge, the quantitative secondary data collected here is a unique but inevitably incomplete set.

Data analysis.

The database was analyzed in the SPSS using tabulations, factor, and cluster analysis (Foster et al., 2006). Because the sample of convenience was used, descriptive analysis was mainly used. The correlation matrix (Table 1) specifies that indicators of sustainability (planet-people-animals) are interrelated, and so are the indicators associated with designer fashion. Factor analysis was employed to avoid duplicating the effect of correlated variables and reduce their number (Table 2). Factor analysis was based on the principal components method, with extraction based on Eigenvalue. Rotation was experimented with, and varimax rotation was chosen to reveal uncorrelated factors. Four factors were extracted, explaining 65% of the variation. The first factor symbolizes sustainability, including the use of the post-use models; the second - aggregates variables related to the designer-led fashion characteristics, including high prices; the third factor indicates labels' success via high levels of Instagram followers and being displayed via fashion platforms *Net-a-Porte* and *Farfetch* with negative but low association with sustainability variables; the fourth factor points out the importance of innovative and recycled materials' use. All four factors were used for the clustering of London brands. Though clustering techniques can be seen as ambiguous, lacking objectivity, and dependent on the variables and techniques chosen they were found to be useful for this research. The rejection of other techniques can be explained by specifics of the data: variables in the database do not strictly fit into 'dependent'/'independent' categories; they are mostly ordinal and nominal; correlations between them are mostly not linear. Therefore, regression techniques were rejected. The hierarchical clustering was chosen instead (Gornostaeva, 2023; Rieple et al., 2015). The 'within-groups linkage' method was used, and intervals were determined using Euclidean distance. A dendrogram was also drawn and analyzed. Groupings of labels

identified by cluster analysis (variations between 4 and 12 clusters) were compared and located in a dendrogram and their ‘fit’ was checked against available qualitative information (published information about the firms, their website information, etc.). As a result of these maneuverings, the final four groups of firms were settled upon as this made classification most intuitively sensible, simple, and ‘conceptually elegant’ (Malone et al., 2006). The final four classes contained firms with distinctive make-ups of design and sustainability value orientations and visible differences in their attractiveness to the customers. The final typology is presented in Tables 4 and 5. Case studies were added in the results section for each group using published material and information from companies' websites.

Table 1. Correlation matrix of the main indicators.

N	Indicators	1	2	3	4	5	7	8	9	10	11	12	13	14
1	Selling on Net-a-Porte 2023 May-June	1.0	0.4	0.3	0.2	0.3	-0.1	0.0	0.3	0.4	-0.1	-0.1	-0.1	0.0
2	Selling on Farfetch 2023 September	0.4	1.0	0.3	0.2	0.3	-0.2	-0.2	0.3	0.6	-0.3	-0.3	-0.2	-0.1
3	Designer-led	0.3	0.3	1.0	0.5	0.7	-0.2	-0.1	0.1	0.5	0.0	0.0	0.0	0.0
4	Education in London's Fashion Colleges	0.2	0.2	0.5	1.0	0.2	-0.1	0.0	0.0	0.4	0.1	0.1	0.1	0.1
5	Brand presented a collection on the LFW	0.3	0.3	0.7	0.2	1.0	-0.2	-0.1	0.2	0.4	-0.1	-0.1	0.0	-0.1
7	Innovative materials used	-0.1	-0.2	-0.2	-0.1	-0.2	1.0	0.0	0.0	-0.3	0.4	0.4	0.4	0.2
8	Post-use business models used	0.0	-0.2	-0.1	0.0	-0.1	0.0	1.0	-0.1	0.0	0.4	0.3	0.2	0.2
9	Instagram followers, rank: 4=highest	0.3	0.3	0.1	0.0	0.2	0.0	-0.1	1.0	0.1	-0.4	-0.4	-0.2	0.0
10	Price, rank: 4=highest	0.4	0.6	0.5	0.4	0.4	-0.3	0.0	0.1	1.0	0.0	0.0	0.0	0.0
11	Sustainability Index, Total 5=highest	-0.1	-0.3	0.0	0.1	-0.1	0.4	0.4	-0.4	0.0	1.0	0.9	0.8	0.4
12	Sustainability Index, Planet 5=highest	-0.1	-0.3	0.0	0.1	-0.1	0.4	0.3	-0.4	0.0	0.9	1.0	0.7	0.4
13	Sustainability Index, People 5=highest	-0.1	-0.2	0.0	0.1	0.0	0.4	0.2	-0.2	0.0	0.8	0.7	1.0	0.4
14	Sustainability Index, Animals 5=highest	0.0	-0.1	0.0	0.1	-0.1	0.2	0.2	0.0	0.0	0.4	0.4	0.4	1.0

Table 2. Factor analysis

		Rotated Component Matrix ^a			
		1	2	3	4
1	The brand presented a collection on the LFW	-.215	.775	.112	.079
2	Selling on Net-a-Porte, 2023, May-June: yes=1'; no=0	.057	.296	.721	-.073
3	Selling on Farfetch, 2023, May-June: yes=1'; no=0	-.140	.336	.660	-.219
4	Designer-led: yes=1; no=0	-.080	.880	.145	.019
5	Education in one of the London high-end colleges; yes=1; no=0	.178	.594	.069	-.135
6	Innovative materials used	.237	-.175	.030	.801
7	Recycled materials used	.064	-.015	-.058	.771
8	Post-use models used	.539	-.136	-.014	-.130
9	Instagram Number of Followers, rank: 4=the highest	-.304	.002	.723	.228
10	Price: 1=low, to 4=high	.114	.634	.406	-.261
11	Sustainability Index, Total: 1-bad; 5- very good	.845	.122	-.327	.274
12	Planet: 1-bad; 5- very good	.799	.166	-.330	.295
13	People: 1-bad; 5- very good	.724	.145	-.213	.349
14	Animals: 1-bad; 5- very good	.687	-.130	.215	.035

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with; Kaiser Normalization.^a
a. Rotation converged in 8 iterations.

Results

Results indicate that a third of firms in the database were graded as 'good' or 'excellent' regarding overall and environmental sustainability (Table 3). This is a relatively good achievement, considering that only 1% globally were evaluated that high (GoY, 2023). The least impressive achievements are in social sustainability: only 14.2% have a 4-5 index mark, whereas 22.8% received an index 1. On the other hand, animals' welfare is taken very seriously - 38.2% of brands have indices 4-5. The labels that develop environmental attributes of sustainability are most likely to develop social attributes as well, though this is not always the case. The evaluations of sustainability provided by GoY correspond well with general knowledge about brands and additional data collected from their websites. None of the London businesses practices anti-consumption marketing, which indicates their general intention to advance economically. Most sustainable firms are not those associated with 'high-end' fashion, the highest price range, or large numbers of Instagram followers. Labels with the most followers on Instagram specialize in high-end design and luxury.

Table 3. Percentage of brands in London in different categories of sustainability.

	Percentage of firms with different Indexes of sustainability							
	N/d	1	2	The sum of 1 and 2	3	4	5	The sum of 4 and 5
Sustainability Index, total: all large firms globally evaluated by GoY				85%	15%			1%
Sustainability Index, total: 1-bad; 5- very good	0.0	4.9	50.0	54.9	16.0	27.2	1.9	29.1
Planet: 1-bad; 5- very good	0.0	6.8	50.0	56.8	13.0	18.5	11.7	30.2
People: 1-bad; 5- very good	0.0	22.8	37.7	60.5	25.3	12.3	1.9	14.2
Animals: 1-bad; 5- very good	16.0	0.6	23.5	24.1	21.6	33.3	4.9	38.2

Source: assembled using GoY data (<https://directory.goodonyou.eco>)

Four groups resulting from factor and cluster analysis provide insights into the diversity of fashion brands in London (see Tables 4 and 5).

Group A includes 30 designer-led brands with high-end, expansive products, presented on prestigious e-commerce platforms. They can be called 'High-end Traditionalists'. All designers in this group were educated in the UK, mainly in the London fashion colleges signaling the exclusive nature of their acquired artistic knowledge and the high rank of their social networks. They are a cosmopolitan group with half being of foreign origin coming from Turkey, China, South Korea, Malaysia, Canada, various European countries, and the USA. Most firms were established between 2009 and 2016 although the length of their period of trading varies significantly (Gornostaeva, 2023). Designers in the dataset specialize mainly in clothing and only a few exclusively design bags, shoes, or accessories. The creation of sustainability value is not their main priority – they score pretty low for all GoY indices. For example, *Jimmy Choo* in this group scored the lowest of one for animal welfare as the company uses real leather for its shoes. This does not mean that these labels do nothing about sustainability. Their reports and websites indicate important renewable, used, and organic materials initiatives. Jimmy Choo sources leather from Gold and Silver Leather Working Group (LWG) Certified tanneries based outside South America, recycles or re-uses leather from production waste, and its leather is chrome or metal-free (Jimmy Choo, 2024). *Burberry* uses ECONYL, a sustainable nylon

yarn made from regenerated fishing nets, fabric scraps, and industrial plastic, for its outerwear collection (Burberry, 2023a). *Burberry* also reports post-use activities, e.g., on launching a UK-based pilot for product rental with *My Wardrobe*, the UK's leading fashion rental platform, and on trial with *Cocoon*, a luxury bag subscription service in the UK. These pilots help inform the company's circular business model strategy (Burberry, 2023a). *Burberry* also initiated a research project with the Hong Kong Research Institute of Textiles & Apparel to develop a system for recycling post-consumer leather products (Burberry, 2023a). As a social initiative, *Burberry* donates fabric to British and Italian Designer Colleges (Burberry, 2023a). However, this is not enough, according to *GoY* evaluations (GoY, 2023). *Burberry* scores low on animal welfare. It also was criticized for the absence of value chain transparency and failures in waste management and treatment of unsold stock (BBC, 2018; Commons, 2019; Weston, 2022). Most companies in this group are oriented on high-quality fabrication in Europe, not the UK, where Italy stands out as a significant hub of luxury craft production. For example, *Burberry*, being a 'Made in Britain' traditional brand, after the closure of its facilities in Treorchy in Wales (Pickles and Smith, 2011), resorted to nearshoring: it has 72% of its suppliers in Italy (Burberry, 2023b) (see table 6), including their manufacturing facility *Burberry Manifattura* in Scandicci, near Florence; it also has first-tier and second-tier partners in Poland, Romania and Moldova (Burberry, 2023a). Most labels in this group enjoy high visibility and success (Table 5), out of 10 labels with the highest index of Instagram followers in the database six belong to group A. Nevertheless, over time, some lose their competitive strength and face bankruptcy, e.g. *Christopher Kane* (O'Connor and Kent, 2023).

Table 4. Classification of Fashion Designers in London

CLASS	Commercial success	Price	Designer-led	Sustainability Index, total	Post-use	Innovative Materials	Examples of brands included in the group
A	YES	HIGH	YES	LOW	NO	NO	Alexander McQueen, Vivienne Westwood, Jimmy Choo, Burberry, Christopher Kane
B	NOT ALWAYS	SOME	YES	HIGH	LOW	YES	Stella McCartney
C	RARELY	LOW	NO	HIGH	SOME	YES	PANGAIA, Bougainvillea, Dai, People Tree
D	RARELY	HARDLY ANY	NO	LOW	HARDLY ANY	HARDLY ANY	Ted Baker

Group B includes 13 brands. Members in Group B are both designer-led and have high sustainability credentials, they invest both in design and sustainability values, such as, for example, 'vegan' fashion. They can be called 'Eco-Chic' brands mirroring 'Eco-Chic' customers (Black, 2011; Bryant and Goodman, 2020; Jahangir and Akther, 2023). In most cases, brands started as high-end brands and added their sustainability credentials later. All indices of sustainability are high; 12 out of 13 brands have a total index of sustainability 4 or 5, and separate percentages of firms with indices 4 or 5 for planet, people, and animal sustainability are also high (Table 5).

Companies in this group actively use innovative materials and employ post-use models (Table 5). The commercial success of the group members is varied, only one company here has the highest score of four for Instagram followers. Labels in this group trace most of its supply chain, with many having production in the UK or European Union, territories with low/medium risk of abuse of labor laws. Most conduct audits of their suppliers. Stella McCartney is an emblematic member of this group. The brand uses some lower-impact

materials, including recycled polyester and organic cotton. The brand explores alternative material options, including vegan silk produced by *Bolt Threads (US)*. Californian Lab delivers raw materials to the Italian mill in Como, then goods are delivered to London (McCartney, 2023). It is a long way for materials to travel to claim sustainable production and reduced emissions along the supply chain. Traditional silk also comes from sources in Como (McCartney, 2023). Both types of silk are not highly durable materials. On the positive side, the brand tries to reduce waste across its entire supply chain and explores ways to achieve higher value chain transparency by participating in the project on blockchains (ECE, 2023).

Groups A and B (27% of labels) represent high-end designers typical of London. However, the sustainability message still needed to be received by all: conducted research estimates that only a part of high-end designers (30% of A and B groups' members) seriously work on sustainability value creation.

Table 5. Characteristics of classes.

CLASS	Total	Designer-led		Commercial success				Price: 4	Sustainability						
		Designer-led	education in high-end	Farfetch	Net-a-Porte	Followers, rank: 3-4	Number of Instagram followers		Post-use	Innovative materials	Sustainability Index Total: 4-5	Planet: 4-5	Animals: 4-5	People: 4-5	
	Count						Mean	Median	Count						
A	30	30	12	25	16	24	1952.7	293.5	23	0	0	0	2	5	1
B	13	11	9	4	2	3	571.5	24.9	8	4	5	12	11	9	6
C	37	3	1	4	5	6	99.0	38.1	4	13	19	34	35	28	15
D	78	3	1	28	7	36	256.4	96.8	10	4	12	2	4	21	2
Total	158														
	%	%	%	%	%	%			%	%	%	%	%	%	%
A	100	100.0	40.0	83.3	53.3	80.0			76.7	0.0	0.0	0.0	6.7	16.7	3.3
B	100	84.6	69.2	30.8	15.4	23.1			61.5	30.8	38.5	92.3	84.6	69.2	46.2
C	100	8.1	2.7	10.8	13.5	16.2			10.8	35.1	51.4	91.9	94.6	75.7	40.5
D	100	3.8	1.3	35.9	9.0	46.2			12.8	5.1	15.4	2.6	5.1	26.9	2.6

Group C can be named 'Born Sustainable'. Sustainability is in the DNA of these firms. It contains 23.4% of members, which score high on sustainability values. Labels here are almost always led by people who are not qualified as designers but are obsessed with sustainability. Many owners have very personal cultural reasons for pursuing sustainability goals, that resemble 'Ethical mavericks', identified by Halder (2019), including achieving comfort during pregnancy, vegetarianism and veganism, care for children, comfort in travel and cosmopolitanism, exploration of distant regions, and social awareness of unsustainable and unfair conditions in foreign countries. These references are similar to those who were identified by Halder (2019) as 'Ethical mavericks'. The 'born sustainable' companies are smaller and often run by families. They conduct in-house limited production but mainly outsource manufacturing to European countries, e.g., Portugal. The use of organic cotton is a usual option; labels try to avoid complex materials that are difficult to recycle; silk is avoided

as it is impractical in use and lacks durability. Companies know about their raw material countries of origin but buy from intermediaries and often do not control raw materials' sustainability. Post-use models are challenging to implement as facilities in London and the UK lack the necessary technologies; some send clothing to recycling facilities in Portugal or Italy.

Table 6. Sustainability ratings for selected brands

	Brand	Instagram following, June 2023	Type	Class	Price	Planet	People	Animals	Number of suppliers in China ² , 2022	Number of suppliers in India	Number of suppliers in the UK, 2022	Transparency Index 2023, (FR, 2023)	Supply chain traceability, (FR, 2023)
1	Burberry	20.0 mln	High-end/luxury, Designer	A	4	4	4	2	8% in Asia		72% Italy; 20% Rest of Europe	38	1
4	Stella McCartney	7.5 mln	High-end/luxury, Designer	B	4	3	3	4	n/d	n/d	n/d	n/d	n/d
8	People Tree	127k	Middle range	C	2	5	5	4	n/d	n/d	n/d	n/d	n/d
7	Ted Baker	1.3 mln	Middle range	D	2	2	2	2	n/d	n/d	n/d	26	27
2	ASOS³ (excluded from typology)	14.6 mln	Fast fashion, online	n/a	3	2	2	3	231	217	24	50	50
6	M&S (excluded from typology)	2.0 mln	Mainstream	n/a	1	3	3	3	196	94	12	38	30
3	Primark (not registered in London)	10.1 mln	Fast fashion, low cost	n/a	1	2	2	2	444	112	13	40	15
5	Next⁴ (not registered in London)	2.5 mln	Fast fashion, Mainstream	n/a	2	2	2	3	n/d	n/d	n/d	36	39

Sources: assembled by author: Instagram, June 2023; <https://goodonyou.eco/>, August 2023; Note: in bold – most selling UK brands; Fashion Transparency Index 2023: the higher the better (FR, 2023); Statista, 2023.

One of the prominent members of the group is *People Tree*. Its products and materials are sourced by fair trade groups and handmade by producers in Bangladesh and Nepal. While its wool is sourced in New Zealand, its leading organic cotton supplier is *Chetna Organic*, which grows cotton in India (Weissinger, 2022). *People Tree* works closely with women artisan groups from Bangladesh who produce handwoven and naturally dyed products. In this way, they are slowing down the resource flow (McAlexander et al., 2002; Pal and Gander, 2018). This brand, however, cannot be called 'local' by any means.

A closer look at some 'born sustainable' labels reveals the problematic nature of GoY's evaluations and a better understanding of difficulties in achieving sustainability and growth simultaneously. For example, *Bougainvillea*, which *GoY* rates as 'great', uses 20-30-year-old second-hand silk saris from India for their in-house production by a small family business using an old Singer sewing machine (Bougainvillea, 2023). High indices reflect that the label uses 'eco-friendly' materials and traces its supply chain. *GoY* associates limited production run with low waste, and manufacturing in London with a low carbon footprint. However, the

² (Statista 2023) <https://www-statista-com.uow.idm.oclc.org/statistics/1102388/number-of-suppliers-of-primark-by-region/>

³ (Statista, 2023) <https://www-statista-com.uow.idm.oclc.org/statistics/1102998/carbon-footprint-of-european-fashion-brands/>

⁴ (Statista, 2023) <https://www-statista-com.uow.idm.oclc.org/statistics/1102998/carbon-footprint-of-european-fashion-brands/>

distance, amounts, and means of transportation of materials from India were not considered. It is unclear whether the business makes any profit (no public information is available), how much it pays its workers and the founder, from whom precisely the saris are sourced in India, and how sustainable this source is. Moreover, silk is not durable, especially in the second-hand form, therefore, there is no expectation that post-use models will be applicable, and that waste will be avoided. This business, however, fits perfectly into the framework of 'slow' fashion. Like many other sustainable brands, *Bougainvillea* uses traditional 'linear' fashion practices such as e-retailing, advertising, and social media marketing and does not introduce radical change (Doherty et al., 2013; Mukendi et al., 2020).

Group C has the lowest number of followers among the four groups. Members of this group are rarely successful. Only one company in this group, *Pangaia*, has a high number of Instagram followers (index 4). However, it experienced multimillion losses in 2022 (Kent, 2024) despite its popularity and the endorsements of various celebrities. Reasons for this decline should be expected more closely. *Pangaia* has the highest index of 5 for both planet sustainability and animal welfare; it is a Certified B Corporation; it promotes itself as a materials science company, its innovations include fabrics made of Himalayan wild nettle, eucalyptus pulp, grape waste leather, etc.

Some members of the group have had to close their businesses as commercially unsustainable altogether. This raises an essential question of correspondence between sustainability indices and the number of Instagram followers. The correlation matrix shows small but negative correspondence. Tabulation confirms that in the group with a minimal number of followers 80% of brands have excellent sustainability indicators signaling that investments in sustainability are difficult to convert into commercial success. An indicative example of complications related to sustainability endeavors is the label *DAI*. *DAI* was a Certified B Corp company with a score of 97.4; it used innovative, sustainable materials and had a collection point for superfluous clothes (DAI, 2023). It had eight subsequent store locations in central London, including Covent Garden, to catch up with the thickest flow of customers in London trading off for the highest commercial rents in the city. Nevertheless, *DAI* was closed in December 2023 after six years of existence (DAI, 2023). In the words of its owner, there is a real problem in combining economic growth with social and environmental sustainability:

"...the cost and challenges of upholding our vision for our people and planet became insurmountable. Moreover, to survive, yet alone achieve fast-paced commercial growth, it would have meant taking shortcuts which would have compromised our integrity. Upon reflection, was my vision too ambitious? Can a business truly do better for people and the planet and achieve commercial success?" (DAI, 2023)

Groups B and C contain 32% of labels and are oriented on 'pioneers of sustainability' (Mukendi et al., 2020) as customers. This number is unexpectedly close to the percentage of professionals in London (30%, NOMIS, 2023).

Group D contains most fashion brands (50%), which are not led by designers and have unsatisfactory sustainability indices. They can be called 'Mainstream Traditionalists'. The dominance of Group D in the London fashion landscape suggests that design-value and sustainability-value creation and maintenance do not form the competitive strategies of many brands explicitly. However, it could be declared by them otherwise. Customer following for group D is higher than for group C but lower than for groups A and B. Companies in this

group serve the tastes of most of London's population attracted to functionality, reasonable prices, and choice.

Table 6 provides examples of selected brands from the database, and, for comparison, some other brands indicated as those most popular among customers in the UK.

Discussion

Classification resulting from this research demonstrates the diversity of fashion labels in London concerning design value, sustainability value, and attractiveness for the customer. Classification itself is the answer to the first research question stated earlier. First, it was confirmed that high-end designer-led brands are prominent in the London fashion industry ecosystem. Two groups were identified in the high-end sector – 'High-end Traditionalists' and 'Eco-chic' brands. Most attractive to the customer are the 'High-end Traditionalists'. This contributes to answering a part of the second research question stated above. This reinforces the point that design-value remains the principal value which leads to competitive advantage in the high-end sector. However, it was also demonstrated that they have uneven devotion to sustainable and slow fashion principles. This indicates that the message of sustainability from the educational and institutional stakeholders needs to be stronger. Second, classification revealed the fact of the minor presence of 'Born Sustainable' labels in London despite the substantial portion of the population following sustainable lifestyles. Brands encounter difficulties on both sides of the value hill. Sustainability-specific challenges relate to additional costs of sustainable value creation. This includes costs of organic and new materials triggered by innovation costs, not fully adopted and commercialized production technologies, and a thinner network of material providers. Going sustainable induces additional information and transaction costs of finding, selecting, monitoring, and auditing adequate, sustainable suppliers of sustainable or alternative materials prepared to sell in small quantities. Though simpler value networks of smaller companies are easier to control, complete transparency requires additional investments and demands a high degree of power over suppliers, which only large companies can provide and afford, e.g., when moving to the level of blockchains (ECE, 2023). On the top of the hill, the challenge is presented by a relatively independent and diverse consumer ecosystem, which plays a vital role in sustainable fashion development that raises further awareness about the 'invisible' character of sustainability value and the crucial importance of educating customers. 'Eco-Chic' and 'Born Sustainable' brands constitute only one-third of all researched brands. This leads to the admission that the adoption of sustainability practices among fashion brands in London is not widespread. Companies that are 'fully sustainable' are rare (the 'Born Sustainable' group totals only 23.4% of 158 researched brands), and their commercial success is questionable even in London praised for its cluster of innovative designers and educated customers. Research conducted in this paper uncomfortably confirms the ten-year-old statements (Palomo-Lovinski and Hahn, 2014) about small numbers and little influence on the overall outlook of the fashion industry typical of 'born sustainable' fashion labels. Practices of 'slow' fashion and sustainability do not allow most labels to achieve economic growth and stability (McDonough and Braungart, 2010; Palomo-Lovinski and Hahn, 2014).

The definite priority in London is given to the value chain's pre-use side, with many brands selecting organic, innovative, and recycled fabrics and materials. Attempts to introduce a circular economy on the post-use side of the value chain are less successful and less widespread, as they have proved to be more challenging to implement. The brands considered in this paper perform some of these functions to a limited extent, delegating post-use

functions to independent providers and platforms. All these activities contribute to *the circular economy*, however, progress is faster in other fashion capitals (Brydges, 2021). Brands indicate that slow adoption of sustainable practices relates to the absence of developed, efficient, cheap, and well-commercialized technologies for selection and the separation of used clothing and materials, fragmented post-use value networks with multiple poorly connected actors and infrastructures, and a limited consumer base for pre-loved products. The above leads to the conclusive statement that fashion brands in London accommodate a limited range of sustainability practices.

Classification ratifies the fact that creating sustainability value does not necessarily command the attention of the customer and does not guarantee commercial success. That contributes to the resolution of the second research question. This reflects the dilemma that brands, named by Haldar (2019) ‘innovative opportunists’, face when trying to reconcile the drive to be sustainable and attempt to be financially successful when dealing with the ‘anti-consumption’ trend among customers and escalating costs. Not all ‘Born Sustainable’ labels thrive for success, some follow the ideology of ‘natural growth’ and are most suited to be called ‘unsuccessful idealists’ or ‘self-employers’ (Haldar, 2019) with low contributions to the growth agendas. The controversial issue of achieving economic, environmental, and social sustainability simultaneously requires urgent further exploration. Future research is needed to shed light on the relationship between sustainability value creation and the economic success of fashion brands.

Polarization exists in London not only on the consumer side of the system but also on the designer/producer side. Customers are divided by income levels, status, and cultural affiliations, and so are the fashion businesses that serve their needs: luxury, 'born sustainable', fast fashion, craft-oriented and second-hand. Moreover, small businesses of different types will always be at a disadvantage compared to front runners and larger companies, which gained a competitive advantage earlier and not via creating merely a sustainable value. Hopefully, this recognition will serve educational and industry institutions well when developing policies and interventions.

The ideal scenario, where all fashion companies, large or small, would create products that were entirely sustainably designed, manufactured, and then disposed of while making a profit (Palomo-Lovinski and Hahn, 2014), still seems far from realization. Some authors suggested the path of 'invisible' or obscured sustainability on the customer side, when customers can buy as much as they want whereas designers and producers look after the sustainability process and there is no difference in aesthetic quality, fit, and price between sustainable and traditionally made clothing (Berchicci and Bodewes, 2005; Niinimäki, 2010; Palomo-Lovinski and Hahn, 2014). However, this suggestion seems quite utopian considering the present state of affairs in the industry and the profound differences in how design value and sustainability value are created and delivered. Palomo-Lovinski and Hahn (2014, p. 91) correctly stated that asking businesses "to make less profit or consumers to have less choice guarantees sustainability's failure". However, the ways of achieving a new 'status quo', where economic, social, and environmental sustainability are in harmony, are inherently contradictory, and trade-offs are needed. Neither designers nor consumers alone can resolve the sustainability problems in the fashion industry; only interaction between the two sides/systems via sustainable marketing and education can stimulate better progress (Vargo et al., 2008). Future research will provide better insights and comparisons, which may improve and strengthen the role of sustainable fashion in London.

Conclusions

In this paper, the complex issues of sustainability were explored for one hundred and fifty-eight fashion brands in London using data and evaluations from various internet sources. Four groups of brands were identified representing their position in relation to the high-end and luxury design value they create, their sustainability practices, and the resulting levels of attention from the customers. Four groups are: ‘High-end Traditionalists’, ‘Eco-chic’, ‘Born Sustainable’, and ‘Mainstream Traditionalists’. The research contributes to the tradition of classifying fashion companies on the attributes related to sustainability (e.g. Holdar, 2019), but adds unique elements such as consideration of a large number of brands both large- and small and medium-sized for the fashion city of London, UK. The first expectation that innovative designer-led firms would be also innovative and fast in adopting new sustainability practices was tested and failed to be entirely true as many established high-end designers increment their package of symbolic advantages with sustainability value reluctantly. The paper has also shown that sustainability value is extremely difficult to establish and maintain and if and when these stages are completed to a degree, the problem of attracting a dedicated customer remains, as proven by experiences of ‘Born Sustainable’ brands.

Implications and contribution.

Presented in the paper classification is useful for the discussion on value creation, delivery, and appropriation, and differences in business models executed in this respect by designer-led and sustainability-led firms. Attention was paid to the fact that efforts double when both values are combined by a brand in an attempt to increase its competitive advantage. It also was noted that Traditional businesses (‘High-end Traditionalists’ and ‘Mainstream Traditionalists’), located on the opposite poles of the functionality-symbolism spectrum, score better on attractiveness to the customer than other types of brands.

The paper draws attention to the fact, considered previously by observers, that sustainability practices contradict the desire for economic growth and an increase in consumption, moreover, ‘slow fashion’ can lead to a fast decline of economic sustainability (profits), and be suicidal to the firms that adopt this philosophy without caution. Simply saying, business models oriented on sustainability presuppose high costs and weak revenue streams. This can be useful for governing bodies in the industry and grant-givers when developing programs for fashion start-up support. The paper contributes to the discussion on evaluation and measurements of sustainability raising another red flag about the absence of consensus on the best approach among academic and business communities. Policymakers and practitioners can use the insights from the presented here classification as a guide for a more critical appraisal of developments in a sustainable fashion.

Limitations and perspectives.

The obvious limitations of conducted research reside in reliance on third-party evaluations of sustainability, which do not cover the whole population of London brands. This can improve with time when more firms will be considered by *GoY*. More attention should be given to the differences between the large and small companies when considering their positioning on the design-sustainability axes to investigate the claim that smaller companies are fast adopters of change and eager initiators of innovation. The next stages of the research should include a combination of quantitative and qualitative methods (e.g. in-depth interviews) to provide a more comprehensive picture of the trends in sustainable business development. Finally,

future research should concentrate on comparing the state of brands' sustainability in other fashion capitals to fully answer the question of the true sustainability credentials of London.

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The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests:

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