

Navigating sustainability in the fashion industry: insights from entrepreneurial perspectives on collaborative approaches

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ABSTRACT

Sustainability is an urgent topic for the global fashion system's full evolution, although coping with it is not a simple task because of the extensive attention, discussions, and media coverage that sustainability in the fashion industry has received in recent years. This article uncovers common themes, provides a holistic perspective, and offers insights into sustainability from an entrepreneurial standpoint, by investigating the collaborative approaches implemented by five cultural and creative industry (CCI) players that are recognized globally for their strong proactivity in developing sustainable practices. Through semi-structured interviews with these experts, this contribution takes advantage of the knowledge, first-hand experience, and lessons learned from frontrunners in the field, a privileged perspective to observe sustainability's multifaceted and heterogeneous nature. The insights presented in this article illustrate the interviewees' perceptions and understanding of the challenges, coping strategies, and factors at play in the process of pursuing sustainable practices in association with other system players. Finally, this work reflects on the tensions arising between the perceived urgency of radical change and the global fashion system's intrinsic disconnection and complexity. It prompts consideration of the pivotal role that networks can assume within this context and underscores the critical necessity of fostering robust and substantive dialogue between bottom-up innovative sustainable practices and top-down regulatory frameworks.

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Introduction

Over the past several decades, the term “sustainability” has become a ubiquitous and trending expression in discussions of global development. The World Commission on Environment and Development (WCED) defined sustainability in the 1987 Brundtland Report, *Our Common Future*, as development that “meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED 1987, 43). Although countless definitions of sustainability have emerged in the intervening years, this remains one of those most widely used formulations to define the concept (Ashby, Smith, and Shand 2013).

In this context, the fashion industry represents a distinctive case that requires examination. On one hand, the frequent use of the term “sustainability” in both industry and academic discourses reflects the growing awareness and pressing need to re-evaluate the non-sustainable “make-use-dispose” model that has defined the sector to date (EMF 2013; Niinimäki 2017; Stahel 2019). On the other hand, the global

fashion system is highly complex and characterized by multiple layers and fragmented structures that necessitate systemic interventions to produce visible sustainable effects across the entire supply and value chain (Ashby 2018; Beard 2008; Buchel et al. 2022).

Scholarly contributions addressing sustainability in the fashion industry consistently exhibit a common pattern of identifying and framing challenges associated with the implementation of sustainable practices throughout all stages of the supply chain. Hur and Cassidy (2019) conducted an empirical investigation that delved into the perceived challenges and opportunities of integrating sustainability in fashion design as observed through the lens of industry personnel. Their study revealed a multitude of internal and external obstacles that impede the implementation of sustainable practices. Notably, stakeholders expressed a perception that the intricate nature of sustainability issues extends beyond the realm of a company's organizational control, thereby posing additional challenges to be navigated. Abdelmeguid et al. (2022) provided a holistic

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understanding of the challenges associated with implementing circular economy business models, highlighting business, regulatory, stakeholder, consumer, and financial pressures. They also emphasized the importance of knowledge, skills, and structural and relational resources that companies should embed in their green intellectual capital to properly enable circularity.

In other work, Gonçalves and Silva (2021) conducted a literature review that shed light on the challenges associated with effectively establishing a consensus on measuring and evaluating key performance indicators (KPIs) of sustainable fashion products, specifically addressing their environmental footprint, social impact, and transparency. They acknowledged the need for a robust scientific methodology for assessing the sustainability in the fashion industry and encompassing all the above dimensions that can be easily comprehensible to consumers. Finally, Brydges et al. (2022) reported on the challenges faced by fashion brands in effectively communicating their sustainability-related actions, revealing a delicate balancing act between brand transparency and genuine sustainability efforts. According to these scholars, brands face the risk of being open about challenges they cannot or will not address, which contradicts their sustainability efforts and exposes them to the dangers of greenwashing.

In this ever-complex global industry, the layered and complicated nature of the supply chain – comprising raw materials and manufacturing, design and development, retail and distribution, and marketing and communication – has often been considered an inherent condition of the fashion industry. In this scenario, networks and collaborations have been identified as key factors that can either enable or hinder the success and survival of industry players (Simatupang and Sridharan 2002). Research suggests that collaborative networks, when properly implemented, can enhance a company's survival, competitiveness, and agility in dealing with market turbulence and complex challenges like sustainability, compared to individual companies operating in isolation (Camarinha-Matos 2009). Eckert, Crommentuijn-Marsh, and Black (2022) conducted a study of micro- and small-sized sustainable firms, confirming the importance of formal and informal networks, partnerships, and collaborations in enabling sustainable design practices.

However, as Buchel et al. (2022) pointed out, despite the emergence of alternative practices and industry collaborations, the fashion industry remains entrenched in unsustainable trends and has shown resistance to change. The authors propose to leverage existing niches and landscape pressures to

support a transition toward positive change that provides (1) new value-chain models based on mutual understanding and reciprocity, joint investments, and long-term partnerships; (2) opportunities for workers to exercise their rights; (3) establishment of stricter social and environmental standards to regulate production and consumption; (4) implementation of innovative products and manufacturing processes through research and development endeavors, collaboration between innovators and incumbent firms, and the accessibility of such knowledge and expertise to the system's players; (5) radical transparency about company impact through decentralized open information-assessment technologies; and (6) new business models that bring consumers to the forefront of circular economy practices. In this scenario, fashion startups and innovative partnerships promoted by incumbent firms can incorporate sustainability principles as an inherent condition and, given their newly born and flexible nature, act as resilient agents and enablers of change (Todeschini et al. 2017).

This study aligns with the existing scholarly literature and aims to examine how emerging and established firms at various stages of the supply and value chain, which are globally recognized for their dedication to forming partnerships within and beyond the fashion industry, perceive and navigate opportunities and challenges related to sustainable practices. It is important to note that our objective is not to conduct an exhaustive analysis of fashion businesses. Instead, we seek to engage in discussions with entrepreneurs about topics that scholars have identified as significant, and observe how these topics manifest in their diverse and context-specific experiences. Our main focus has been to investigate the factors that entrepreneurs perceive as either facilitating or hindering sustainable practices within a networked framework. We have also aimed to understand the strategies employed by frontrunners in pursuing these objectives. To achieve these ambitions, we conducted interviews with five key players operating in both downstream and upstream phases of the CCI and fashion system-value chain. These individuals were chosen as experts due to their unique perspectives, qualifications, and firsthand experience in the industry. The insights presented in this article are highly valuable, as they allow us to delve into the complex nature of sustainability in the fashion industry and to gather empirical lessons learned from an entrepreneurial standpoint. Unlike previous studies, this work extensively incorporates the interviewees' own words, presenting their perspectives in a roundtable-like format. By incorporating the

respondents' firsthand lived experiences, our approach aims to add depth and richness to their perspectives on sustainability.

This article is organized into several sections. First, we introduce our interviewees and describe the methods that we employed for data collection and analysis. We then present the results in four sub-sections, beginning with an exploration of how the interviewees conceptualize sustainability, emphasizing that its nature is simultaneously holistic, nuanced, and context-dependent. We subsequently discuss the dialogic relationship between the company's introspection, which involves re-evaluating its core resources and competencies in relation to sustainability, and collaboration approaches, which entail seeking synergies and facilitating networked sustainable practices. We underscore the importance of viewing these practices as iterative endeavors that require a work-in-progress (WIP) logic. Further, we recognize the fashion system's fragmentation and complexity as a factor that hinders systemic implementation. The interviewees propose aligning language and communication as strategic practices to navigate this complexity. Finally, we report on tension between the perceived urgent need for radical change and the slower pace at which global fashion-industry infrastructures are advancing, highlighting that this is a key systemic challenge to address when envisioning future actions to realize a sustainable transition.

Materials and methods

To gain comprehensive insights into sustainability from an entrepreneurial perspective, we conducted a series of one-on-one semi-structured interviews with a heterogeneous cohort of globally recognized front-runners committed to a systemic vision of sustainability (Bogner, Littig, and Menz 2009). The interviews were designed to explore the respondents' approach to sustainability from organizational, technological, and socio-cultural perspectives, as well as their contribution to sustainable development within the fashion industry from a holistic and networked viewpoint. We also questioned them on current challenges, future milestones, and further issues that arose throughout the conversations. In selecting the interviewees, we applied specific inclusion criteria including:

- Involving a diverse range of businesses, encompassing both startups operating in the fashion industry with a strong dedication to sustainability and established companies pursuing groundbreaking sustainability-related projects.

- Prioritizing businesses actively engaged in collaborative and strategic partnerships for sustainability-driven initiatives, involving stakeholders from various sectors within and beyond the fashion industry.
- Ensuring representation of interviewees from different roles and stages of the fashion system's supply and value chain, allowing for a comprehensive perspective on the topic.

For participant selection, we utilized purposeful sampling by reaching out to businesses that aligned with the aforementioned inclusion criteria. During our recruitment process, we employed diverse strategies to establish contact with potential participants. Specifically, we utilized multiple approaches, including leveraging our own organizations' networks, reaching out to businesses' public relations (PR) representatives, and sending direct emails as well as reaching out through professional networking platforms like LinkedIn. We extended invitations to various companies to participate, providing them with comprehensive details regarding the purpose of our research, the topics to be discussed, and the interview format. Out of the twelve companies contacted, five agreed to participate in the study.

The interviewees included:

- The Founder and Chief Sustainability Officer of ACBC, a footwear industry Certified B Corporation company that supports brands in their material- and process-sustainability transformation.
- The Head of Content and Strategy at The Fabricant, a digital fashion house that drives the fashion industry toward digital-only clothing.
- The Founder and President of Italian Artisan, a business-to-business marketplace that facilitates meetings between international buyers with small- and medium-sized enterprises of "Made in Italy" fashion.
- The Head of Strategic Marketing at Fulgar's, an international leader in the human-made fiber market that researches and develops bio-based, recycled, and high-tech yarns and manufacturing processes.
- The art directors and curators from the Milanese multidisciplinary agency 2050+ and the streetwear retailer and distributor Slam Jam, in their role as editors of CIRCLE (a joint project between 2050+ and Slam Jam, an ongoing digital think tank investigating "People, Health, Green, and Waste" using Milan as a blueprint for exploring planetary challenges).

We conducted the interviews online between February and May 2021 and each lasted for approximately 30 to 45 minutes. We recorded and transcribed all of the interviews with the consent of the participants.¹ We adopted the “denaturalized transcription” method (Nascimento and Steinbruch 2019; Oliver, Serovich, and Mason 2005) to facilitate the content analysis and improve the contribution’s comprehensibility. Denaturalized transcription is designed to enhance the data’s clarity by correcting grammatical errors, removing interview noises, and standardizing nonstandard modes of speech. By emphasizing written language’s characteristics over those of spoken dialogue, the transcription includes such elements as commas, extended pauses, and completed sentences that are not found typically in natural conversations (Nascimento and Steinbruch 2019). In contrast, “naturalized transcription” transcribes the speech as it is, preserving spoken language’s characteristics and features, rather than adapting the spoken discourse to fit written language’s rules (Oliver, Serovich, and Mason 2005). All of the interviewees received and agreed on the transcript’s final version, granting consent for their respective role and affiliation to be disclosed.

We then performed an inductive data-driven thematic analysis in six steps (Maguire and Delahunt 2017): familiarizing ourselves with the data; coding; generating initial themes; reviewing, defining, and naming themes, and writing-up. We selected interview extracts that made the networked perspective visible specifically, although many other stimulating insights extended beyond the scope of this article.

Other scholars such as Pedersen and Andersen (2015) who have adopted expert interviews as an empirical method in sustainable fashion research have noted that

the knowledge, values, attitudes, and cultural stances of the participating experts...cannot claim to provide a picture of the “real world.” Nonetheless it contributes with a nuanced understanding of current challenges and opportunities within the industry, as experienced by key stakeholders in the field. (Pedersen and Andersen 2015, 315)

Similarly, the empirical results we provide in this study are not intended to be universally applicable. Instead, they acknowledge the unique and situated perspectives of industry experts, who can serve as inspirations for future research in the field and guide like-minded professionals. In light of this context, the following discussion devotes a substantial portion of its content to the interviewees’ statements. This deliberate approach aims to comprehensively convey their distinct viewpoints and personal

experiences, enabling a holistic understanding of challenges and coping strategies associated with the adoption of sustainable practices within the fashion industry ecosystem. It is worth noting that the participants that we selected all have a vested interest in presenting their company’s sustainability approaches in a favorable light. This is due to their active involvement in promoting their businesses’ sustainability agendas, occupying key positions as founders, heads of strategy and marketing, and editors. We are fully aware of the potential biases stemming from the participants’ roles and their potential influence on the gathered data. To address this situation, we have taken measures to acknowledge and transparently account for their situated perspectives throughout the discussion. By doing so, we aim to ensure the integrity and validity of the data are not compromised.

Results

This section comprises four subsections. The first offers an overview of the interviewees’ conceptualization and pragmatic view of sustainability. The second deepens the sequence described as “introspection, collaboration, and iteration,” as a best practice in engaging with and evolving sustainable practices. The third explores challenges and opportunities when practicing and extending sustainability beyond the company’s boundaries by taking advantage of “language and communication.” The last provides a broader reflection on the tension throughout the entrepreneurial world with respect to practicing sustainability.

The many facets of sustainability

This subsection illustrates the interviewees’ perspectives on their mission and concrete experiences with sustainability. The professionals who participated in this study have diverse backgrounds and possess unique viewpoints situated in their context-specific practices. Through their narratives, the objective was to highlight the diverse nuances of similar actions, to connect differing perspectives, and to identify common ground that unites their outlooks. The first interviewees, CIRCLE’s editors, begin the conversation by offering an account of this concept’s multifaceted nature.

The word “sustainability” is a bit narrow, it is very often an abused term used in an imprecise way, used partially to refer only to a particular type of environmental sustainability. We like to think of the word “sustainability” as an expanding theme, which manifests itself transversally in the field of social

justice, as much as in ecology, and work relationships. The ideological cornerstone is understanding sustainability applied to different fields of human action...Sustainability emerges from the topics we deal with in CIRCLE, the famous four categories, people, health, waste and green," which are not particularly specific but give the idea of the perimeter in which our conversation takes place (*Curator at 2050+, partner in CIRCLE project*).

This perspective underscores the need for a more expansive and inclusive definition of sustainability that extends beyond a narrow focus on the environmental dimension and manifests across different aspects of human life. Italian Artisan's mission reflects this expanded view, as the company asserts its commitment to supporting local manufacturing communities with respect to their survival, visibility, and development by promoting and protecting traditional artisanal practices, while advocating for economic, social, and cultural sustainability.

We help international brands to produce in Italy in a simplified way and we help Italian manufacturers like small and medium artisans and businesses to get access to new clients internationally...We apply an inclusive and sustainable business model, following the logic of shared assets and respecting the local manufacturing ecosystem. When we're talking about "Made in Italy," we're not just talking about products, but heritage and tradition. We see companies that are run by the seventh family generation. When you enter those companies, you don't just acquire a shoe, a tee-shirt, or a suit; you get access to hundreds of years of knowledge and know-how. It's essential for us to communicate to brands that producing in Italy is ethical because of the district's ecosystem and kilometer zero.² Most of the districts inherently embody sustainability, even if they do not actively promote or emphasize it. The full ecosystem to produce a good can be found in a radius of 15 kilometers, so we talk about very short distances, compared to other supply chains (*Founder and President, Italian Artisan*).

This respondent emphasizes that sustainability can manifest itself on multiple levels, including the preservation of heritage, culture, and tradition, the acknowledgment and valorization of district communities' social dimension, the environmental benefits of supporting proximity and short supply chains, and the opportunity to incorporate sustainability into company operations through a revised business model. Similarly, Fulgar recognizes the different spheres of sustainability's interdependence (Williams et al. 2019) and reports how this perspective applies to the exemplary case of waste management and circularity.

When we talk about sustainability, the meaning of this concept lies in the environmental, economic, and social dimensions; these are at the center of

sustainability. The very concept of sustainability is contained in these three directions; all three must co-exist because if you remove one of the three spheres, you lose all of the value...The more we go forward, the more the need to optimize the industry, be sustainable, and achieve savings grows. Waste management will be even more critical because waste is a high environmental, social, and economic cost...Today, brands and companies are much more aware of the issues waste management poses at a cross-cutting level. Waste is becoming a valuable resource. In our journey, we have recently explored the concept of biodegradation, we are moving step by step. We have achieved preliminary results, even if not optimal for us. We have developed a type of nylon that can biodegrade within five years, creating biogas. These biogases may be used to produce, for example, energy. We are moving toward a closed cycle, a circular logic from an inorganic chain to an organic one (*Head of Strategic Marketing, Fulgar*).

The interviewee stresses the importance of sustainability and the need to optimize industrial processes, achieve savings, and manage waste efficiently by changing the lenses through which reality is observed by transforming previously considered costs and burdens into valuable assets (Nogueira, Ashton, and Teixeira 2019). The Founder and Chief Sustainability Officer (CSO) of ACBC, a company recognized for conducting substantial research to develop innovative alternative materials with a focus on minimizing waste throughout their production and end-of-life processes, echoes this sentiment.

At ACBC, we do significant research, and we provide it to as many brands as possible including the ones we build collaborations with and we produce for. For example, we are making a heel in polyhydroxybutyrate (PHB), a bio-plastic. PHB is a natural bio-derived and biodegradable polymeric material, a technology that comes entirely from nature, that dissolves without undergoing toxic chemical processes, and it is injectable, like plastic. So, it's a perfect replacement for plastic on a conceptual level... We are now applying this research with a fashion brand (*Founder and Chief Sustainability Officer, ACBC*).

Both ACBC and Fulgar exemplify the significance of research and development in sustainable practices, emphasizing the relevance of innovation and exploration in making sustainability operational as a tangible reality. Their approach revolves around re-valuing existing resources and pioneering novel processes that optimize the utilization of materials throughout their entire lifecycle. This includes various stages, such as research and development, initial results that have room for improvement, and ultimately applying these advances within the fashion industry. Moving toward the downstream stages of

the fashion industry's value chain, The Fabricant offers an interesting outlook on how digitalization practices and digital fashion can contribute to reducing the carbon footprint and encouraging sustainable innovation in the fashion industry.

We were founded with quite strong sustainability principles. We don't think of ourselves as a sustainability company. It's not how we talk about ourselves externally. Still, within the company, it is sort of one of the founding principles. It's interesting when many brands come to us with this desire to de-carbonize parts of their industry. But, indeed, 3D sampling and creation is an easy win; making digital marketing assets is an easy win. According to our sustainability report, de-carbonizing all those things allows up to a 30% reduction in carbon impact. When it comes to our own digital-only work, the carbon-impact reduction from a physical garment is 97%...What we imagine when we talk about it internally is that physical fashion will become much simpler and less expressive because of the environmental effect of physical fashion. Digital fashion will become more powerful and more widely taken up. Digital fashion will stay where you express the more outlandish aspects of your personality, and you can be creative and playful at no cost to the planet. That's not correct, at a much-reduced cost to the planet (*Head of Content and Strategy at The Fabricant*).

This respondent provides valuable insights into the potential advantages of digital fashion in facilitating waste reduction within traditional value chains through the streamlining of resource-intensive operations. Additionally, the quote emphasizes how digital fashion can introduce consumers to new means of engaging with fashion while significantly minimizing environmental impacts. However, it is important to note that while The Fabricant may promote the idea of digital fashion as a pathway to a more sustainable future, the company also recognizes the challenges associated with carbon emissions linked to server-farm usage and the understanding that digital fashion does not equate with waste elimination. Expanding upon this perspective, CIRCLE's editors draw attention to the growing issues in digital-mediated actions and their energy consumption, warn of the virtual realm's material wasteful dimension, and provide insights into the way that this perspective has affected their practice.

Our two editorial releases on CIRCLE on the waste topic precisely investigated digital waste and the material effect of each of our daily digital micro-actions, from taking a selfie to sending a photo via WhatsApp to having a website with many bombastic graphics. These practices consume significant energy and generate high pressure on data centers (*Curator at 2050+, partner in CIRCLE project*).

Of course, every upload and download, every megabyte on the web generates energy traffic. In general, the CIRCLE platform limits the uploadable megabytes for each entry to a rigorous level. The reasons are in line with the concept of awareness that each megabyte generates energy consumption and the need to make the platform's navigation accessible and usable for the most significant number of people...A next step that would be interesting to tackle is to transform CIRCLE into a more responsive and sensitive platform to renewable energy...This discourse is still in an embryonic phase (*Architect at 2050+, partner in CIRCLE project*).

This statement by CIRCLE's editors' is centered on increasing awareness of the carbon footprint of digital practices powered by unsustainable energy and it stimulates critical thinking on the material dimension of virtual activities with respect to processing data and delivering information (Kokke and de Oliveira 2018). The restrictions CIRCLE places on the number of uploadable megabytes for each entry provides a tangible example of the way that sustainability can be incorporated into the development of specialized communication channels and tools. In line with this, Fulgar's Head of Strategic Marketing underscores the importance of contemplating the consequences inherent in every decision, posing questions about the feasibility of achieving a carbon-neutral state.

The issue is that ultimately any choice has an impact. The goal is to figure out what is the least impact you can make in the future. Is it possible to be zero impact? One day, probably, there will be self-generating energy-production systems, but there will always be an emission. It is very complex to go below zero; reaching zero would already be one thing. Going below zero would become the goal (*Head of Strategic Marketing, Fulgar*).

Defining the concept of "sustainability" has been a topic of much debate among scholars, and many acknowledge the challenges of setting strict boundaries given its pervasive and broad nature (White 2013; Giovannoni and Fabietti 2013). Rather than attempting to resolve these debates, this section acknowledges the multifaceted nature of sustainability and its dependence on context, aligning with Hur and Cassidy's (2019) perspective. Each participant in the study offers a unique understanding of sustainability, albeit with overlapping viewpoints, as it relates to their respective practices. These understandings span practical approaches to addressing environmental concerns, as well as business model innovations that embrace sustainable growth and cultural preservation. Ultimately, the aim is to embrace a holistic vision of sustainability that encompasses environmental, cultural, social, and

economic dimensions (Williams et al. 2019), though achieving this comprehensive perspective appears extremely challenging.

Despite the diversity in how sustainability is practiced, a shared paradigm emerges from the discussions: that of work-in-progress (WIP). This paradigm entails an ongoing cycle of practice and learning, an acknowledgment of responsibility, and a continual refinement of objectives based on emerging elements and challenges within the ecosystem. In this context, the identification of best practices and their recognition as WIP becomes crucial for establishing new milestones (Pedersen and Andersen 2015) to address sustainability considering the interdependence of its various dimensions (Williams et al. 2019). The following section will provide a more in-depth exploration of practical implementations of the WIP logic at a network level.

Introspection, collaboration, and iteration

The insights, experiences, and knowledge gained from the past and present partnerships of the interviewees provide valuable perspectives on meaningful strategies and practical operations that affect other fashion value-chain stakeholders. These strategies encompass a reciprocal interplay between introspection and collaboration, supported by an ongoing iteration of best practices. In this context, introspection involves the company critically reevaluating its core resources and competences in response to internal and external sustainability demands. Collaboration, by contrast, involves actively seeking synergies and fostering networked sustainable practices with external partners to collectively address complex sustainability challenges and to leverage shared expertise and resources. One example of the way that introspection has played a role in promoting sustainable practices can be seen in Fulgar's experience, as their Head of Strategic Marketing describes.

[I]n the last ten years, we explored recycling in terms of output. Out of every 100 kilograms of yarn produced by Fulgar, 26 million kilograms is waste. Basically, we had to recover everything that we found at home and in our satellite companies and then we moved toward finding materials from outside. Before we started, we had to do a material audit. We were able to experiment through our scraps, knowing the material we were working with. So, we started and created a database to see if we could lean on another waste supply. And by looking for a material that was more compatible with our standards, we were able to move a step further. However, it was born from an internal necessity pushed by an external market that was beginning to have this need. (*Head of Strategic Marketing, Fulgar*)

In this instance, the principle of introspection is depicted as a resource-based approach of knowing one's materials, resources, and capacities to plant the seeds for collaboration. This internal reflection and understanding allowed the company to identify ways to recover waste and find compatible materials from outside, which eventually helped it move toward more sustainable practices. The tension between internal necessity and external market need that shapes a company's core approach is particularly visible in the experience of startups, flexible entities that shape their offers dynamically to fit the market need better (Blank and Dorf 2012). The Fabricant's case provides an interesting representation of this tension.

There are two different strands in our business. When we are creating for our own fashion label, our garments will never be made. The Fabricant makes couture that will never be made, this is what we do, and we insist on. When we work with other brands, obviously, brands are physical, they have physical contents, so we digitize what we can in terms of the supply chain and marketing content creation. So the carbon impact is reduced with our own work...the pandemic has absolutely accelerated everything that we do. We became in the fashion industry's minds not something that was a novelty nice to have, but something that had the resilience and sustainability that worked with creativity and set out a plan for how fashion would operate in the future. (*Head of Content and Strategy at The Fabricant*)

The company's commitment to virtual-only fashion clothing and accessories that will never be worn in the physical domain represents an inward focus on its own creativity and vision to explore its capacities and resources fully. At the same time, the company's collaboration with other brands involves an outward focus that complements other players' specific necessities. This dynamic tension between introspection and collaboration underscores the importance of a holistic approach to sustainability, one that balances internal reflection with external engagement and collaboration. In this respect, ACBC mirrors The Fabricant's approach, where core brand activities and collaborations are parallel but complementary paths:

ACBC has a particular business model. The ACBC brand entails creating a collection of sneakers that has the lowest possible effect on the environment, from a scientific point of view, and can convey messages about social and environmental issues through a coherent aesthetic, interpreting sustainability in a futuristic way. Co-branding is a collateral activity... We have a fundamental research and development division. We believe in sharing our research with as many players as possible. We don't care if you are

Boxeur des Rues or Chanel, if you come from the mass or the luxury market; what counts for us is supporting a brand to improve itself and materialize this development leveraging the certified supply chain we provide them. We work with factories undergoing audits, and raw material suppliers with certifications. We work according to these principles; we ask for documents before working with them. Then we start collaborating, analyzing, and doing research. Sometimes we work with small suppliers that don't have certifications yet but are under development....All these activities feed into a business model that is built on various pillars. Survival force is what drove us to look for all these different revenue sources. (*Chief Sustainability Officer and Founder, ACBC*)

The perspective shared by ACBC's founder sheds light on the dual impact of diversifying the company's business channels. On one hand, introspection cultivates and reinforces an internal vision that distinguishes the company from others in its approach. On the other hand, collaboration increases the company's own viability through the generation of multiple revenue streams, while also empowering other companies to embrace sustainability practices. The urgency of making this process accessible to as many brands as possible, regardless of their market positioning, is also reflected in what Fulgar refers to as a "freestyle" company:

We consider ourselves a "freestyle" company; this is our philosophy. Sustainability can't be exclusive to just a few brands. If we start excluding companies, we're not allowing them to practice sustainability. More experienced companies are out there, as others are beginning to approach it right now. Limiting these products exclusively to luxury brands for purely communication reasons implies losing the opportunity to develop such textiles. (*Head of Strategic Marketing, Fulgar*)

While Fulgar stresses the importance of a freestyle logic in approaching sustainability from a collaborative perspective, The Fabricant provides an account of how this collaborative and dialogic effort works in sorting things out, and combining internal and external competencies, needs, and opportunities:

When we work with brands, it's a collaborative process. Lots of the big fashion houses have an awareness of the digital space, but they don't necessarily have an awareness of how we can help them. So, they come to us and say they really want to do something with us, without knowing exactly what they should be doing, which is entirely reasonable today. Therefore, we try to get them inside. We try to check their requirements and find how that could manifest in what we do, and then we guide them. We are in this process of iteration of working things out with them collaboratively and it's very much about how can we meet the brand needs and make

it a big deal. So, it's a very co-creative process. (*Head of Content and Strategy at The Fabricant*)

The quote above emphasizes that in innovative and underexplored fields, collaboration assumes the features of mutual discovery and co-creativity, as many fashion system players are aware of the opportunities offered by the digital realm, but do not know how to enter it. The search for complementarity as a trigger to initiate collaboration may also be conceived beyond the boundaries of the textile and fashion system. Fulgar's experience suggests that industrial synergies are additional routes that companies may follow to extend their sustainability practices through cross-sectoral interactions (Patwa and Seetharaman 2019).

We launch[ed] a project on a post-industry recycled product. We were looking for an industry that could constantly supply waste because its products are necessary and indispensable. We found a particular industry fitting our requirements: automotive. So, we connected with the automotive industry; we worked on tires through a chemical process respectful of sustainability principles to obtain valuable material by "simplifying" a longer, more complex production chain. Tires are re-valued: from a valuable" product to a more valuable one. This type of sector was chosen because it creates critical mass...The project does not stop here because this industrial process will also make it possible to evaluate the recycling of garments. In the second step of the process, there will be the possibility of recovering dyed clothes—one of the main weaknesses of recycling processes—bringing them back to their initial state: as polymers that are still suitable for textile use. (*Head of Strategic Marketing, Fulgar*)

With this statement, Fulgar's Head of Strategic Marketing establishes a connection between the company's internal reflection process, which involves auditing material and assessing resources, and their perspective on how collaborating with other industries can enhance waste-management processes and inspire future recycling innovations that feed back to the company and the overall fashion industry. The concept of iteration emerges as a crucial factor that may allow partnerships and projects to be initiated and evolve over time. The genesis of CIRCLE's platform exemplifies this process, and provides a noteworthy illustration of the relevance of cross-sectoral collaboration and iteration of partnerships in sustainability-driven endeavors.

Our first interference in the world of sustainability and fashion began with a dialogue with Nike. We entered the world of fashion through the door of the more expanded world of sport and movement

through research lasting more or less a year. (*Architect and Creative Director at 2050+, partner in CIRCLE project*)

[CIRCLE] was born from the need for Slam Jam to look out into the world of sustainability, broadly speaking, trying to find a way that was authentic and compatible with our DNA. With 2050+, we found ourselves in a common language, even if they are two realities dealing with different areas. (*Art Director (until July 2021) at Slam Jam, partner in CIRCLE project*)

We have found a commonality of purpose concerning the issues we believe is crucial and urgent to discuss. (*Curator at 2050+, partner in CIRCLE project*)

The multiplicity of outsiders who may play a role in the fashion system's sustainable transition shows the importance of listening to and engaging in conversation with players from other industries, sectors, and disciplines to discover how these worlds may overlap, inspire, and feed each other (Bourlakis et al. 2014). The personal experience of The Fabricant's Head of Content and Strategy reflects again the need for cross-sectoral conversations as they highlight sustainability's transversal nature in that compatible intents and visions from professionals in different fields intersect.

It's very interesting this sort of blending of cultures. I have many conversations with people in other industries to collaborate and understand where we're coming from. There is a gamification group in Finland whose field of research is entirely on gamification and sustainability, specifically how gamification influences the nature of sustainable consumption...I met one of the researchers at a sustainability conference. It had nothing to do with The Fabricant, and we just got into this great chat. A couple of years down the line, it turned out that our worlds had a brilliant overlap. (*Head of Content and Strategy at The Fabricant*)

Overall, the insights gained from the interviews underscore the significance of having a clear vision and a comprehensive understanding of internal resources for enterprises to position themselves and start embracing sustainable practices. This process involves introspection, which entails an inward endeavor to identify, evaluate, and establish the core resources, capabilities, and commitment to sustainability at the company level. Notably, the drivers for this process of introspection extend beyond mere internal motivation, as market needs and consumer pressure may play influential roles in shaping companies' sustainability strategies and initiatives (Abdelmeguid et al. 2022). Furthermore, collaboration may play a vital role in outward efforts to seek

complementary resources or to address the needs of others in order to promote sustainable practices (de Abreu et al. 2021). By collaborating with entities from diverse market positions or sectors, organizations not only have the potential to contribute to making sustainability an inclusive and viable path for other players within the ecosystem but also have the opportunity to diversify their revenue streams and strive for long-term business viability. Additionally, our study highlights the iterative approach, recognizing that each project's outcome serves as a novel starting point within an ongoing WIP logic. This approach views every partnership and collaboration as an opportunity for experimentation, enabling expansion of the company's portfolio of experiences and enhancing its reputation within a broader context. In the next section, we explore the role of language and communication in establishing collaborative practices, broadening the sustainability discourse to encompass other relevant actors, such as consumers, who can play a key role in the process.

Language and communication

The value of establishing sustainability practices as the product of a collective effort among players within and beyond the boundaries of the fashion system is clear from the expert experiences reported in the prior subsection. However, what factors can foster or hinder these collaborative sustainable practices? The following discussion explores what the respondents described as the principal barriers to implementing a systemic and networked approach to sustainability and characterizes the practical tactics and strategies that they adopted to address these difficulties as a map of approaches. A common theme that all interviewees indicated is a stumbling block in achieving sustainable systemic practices is the intrinsic fragmentation and intricacy of the fashion industry-supply chain where language and communication play a crucial role. Fulgar's Head of Strategic Marketing illustrates this concept by sharing an entrepreneurial experience and pointing to the information gap in traceability arising from the complexity of exchange and communication dynamics between production phases.

H&M recently launched "Conscious Collection that basically includes some sustainable materials, among which is Fulgar's Evo® fiber...Before launching it, we dedicated a minimum of five months just to align all the parties in terms of communication. We discussed how to talk about it and design the label and explain to the consumers what they were buying. On the bio-based material, we have weaknesses too; Fulgar is not perfect. There are many complex

elements that should be considered. The initial part of the supply chain is perhaps the most complicated. When we start working with different minds in the first production phases various forces and different balances come into play. The information exchange and communication between the agriculture and chemistry worlds is still very complex. For example, Evo[®] is a bio-based product derived from castor oil. The goal for us was to understand exactly where this castor oil came from. Unfortunately, we cannot pinpoint the exact origin of this castor oil because the chemical production is a combination of multiple cultivations. So, we may have cultivation coming from an area in India, another cultivation coming from northern China, and so on. This is an essential element that we have emphasized and an important thing to say.... Today, we have a very good level of traceability, but a piece of history is often missing. Even in a narrower value chain, an information gap is there. (*Head of Strategic Marketing, Fulgar*)

While the previous subsection emphasized cross-sectoral collaboration as a driver of sustainable innovation, this perspective highlights the challenges faced by textile and fashion companies in effectively communicating with suppliers from different sectors and industry partners. It underscores the need for these companies to dedicate considerable time and effort to carefully convey their commitment and progress to consumers, while also remaining mindful of the risks associated with greenwashing (Nemes et al., 2022). The interviewee also points to other challenges that emerge when the ecosystem's various and multiple players lack proper communication, both due to the inherent complexity of the supply chain and different languages (Gonçalves and Silva 2021). Being aware of the complexity of communication processes among the subjects in the system is crucial to beginning the search for suitable tools to limit misunderstandings. Italian Artisan moves in this direction in the effort to address this misalignment by mediating communication for complementary players with different backgrounds.

[W]e had to deal with a mismatch in communication, since we were talking about connecting different domains and languages, between brands and producers. So, the producers with a technical background, and brands with a creative one. And our job was a matter of aligning information for them... We gained significant experience and learned a lot about the characteristics of a highly fragmented supply chain, such as the "Made in Italy" one. There are several players and many entities in the ecosystem, making the full picture...[and] by growing slowly, we had the chance to understand which small data are moving within the whole communities and value chain. We identified who is working inside the ecosystem of producers, which is crucial...We invested time in understanding our users,

such as a concierge aptitude: so, we did everything for them, especially the first activities, and then we understood their needs. (*Founder and President, Italian Artisan*)

The importance of acknowledging the diverse identities and profiles in the ecosystem and investing effort to develop a shared vocabulary (Fletcher and Grose 2012) is also reflected in ACBC's interdisciplinary research and development environment and its interesting position as both a business-to-business and a business-to-consumer enterprise.

We try to speak the language of chemists, go deep in the matter, and understand, for example, what happens when a bio-acetate is created, how it is made, and why it is not sustainable. In short, going in deep, for me, means learning a bit of chemistry, a bit of transformation processes, etc...[At the same time] our contribution to the fashion industry, I hope, is educating consumers, finding a way to communicate what we do in a way that it's not boring, teaching people how to choose products like they choose their foods, so products that are safer for people and the planet, using our product as vehicles. (*Chief Sustainability Officer and Founder, ACBC*)

Being aware that the language used to communicate between enterprises differs from that used to establish relationships between firms and consumers leads to not only the search for specific forms of communication, but also what reflects the perceived need for strategies to convey key information to consumers about sustainable fashion products in effective and easy ways (Gonçalves and Silva 2021). As ACBC's Founder and CSO indicated, the communication may not be limited to verbal modes. It can assume different shapes and convey information by translating the message in an accessible way, aligning visual codes and tone of voice, and using products themselves as images and vehicles of sustainability (Peirson-Smith and Evans 2017; Brydges et al. 2022). CIRCLE's editors provide another account that reflects this perspective, where language and communication become multilayered resources.

Even the graphics and settings of the platform are straightforward to make it accessible to anyone. Any user must be able to use CIRCLE, make contributions and enjoy others. On the Slam Jam side, we also tried to create an appealing graphic design in line with the language that unites Slam Jam and 2050+. Furthermore, it is aligned with the visual characteristics the younger generations are familiar with and pushes them to focus on the content themselves...Having such a platform under Slam Jam allows younger generations not yet sensitive to this issue to explore sustainability through straightforward educational pills and more complex artistic interventions by contributors explicitly involved with publishing on the platform. And it's both a

communication method and a much more direct link. So, in the same flow, there are artists, citizens, people. It's a very inclusive type of platform where the intent is precisely to create a new language and a new way of communication, to expose different targets to sustainability through various means and experiences. (*Art Director (until July 2021) at Slam Jam, partner in CIRCLE project*)

CIRCLE is a tangible example of how the search for new and fruitful forms of communication has led to the creation of virtual meeting places engaged in an effective translation of different languages. By using creative interventions and conveying sustainability-sensitive experiences and reflections through “educational pills” – concise and easily digestible pieces of information – CIRCLE strives to make sustainability more accessible and comprehensible for individuals who are unfamiliar with its diverse aspects. While CIRCLE explores the diversification of sustainability manifestations through educational and artistic means to the wider public, The Fabricant actively engages in conversations with audiences that may not be familiar with the potential of digital fashion within sustainability discussions. They do so by using relatable examples, like everyday digital interactions, to convey their message as effectively as possible.

Well, for us, it is interesting. We just did this project with Buffalo London shoes. When we talk on all our platforms, we're very used to speaking to a very digitally-centric audience who, to a quite significant degree actually, is entirely onside with what we do. They get it. They're very excited and positive. When we go outside our world—this happened for the first time when we created the first sort of digital couture to appear on the blockchain that went into *Forbes*—it made people so angry...So, we've kind of dealt with that at the very early stage of our journey. So, when we went on this project with the footwear brand Buffalo London, it was the first time a digital product had been placed on the website of a regular brand. Usually, digital items are within the gaming environment. Everybody who is into gaming gets it. When we put it next to real physical inventory and then offered it just as a digital choice that does not physically exist, it made people really angry again because they'd never been exposed to it...When you put it in the context of how people mainly interact with others on a daily basis, probably through a screen, why do you need to create something physical for that interaction? You probably don't. And once you start to frame digital fashion as a way to begin to impact the carbon footprint of the entire fashion industry, and in ways that people understand, it does really land with them. As we engage in more projects that intervene in the physical realm, there is still a sense of shock that people experience. It'll just take a little more time to get there, there's work to do yet. (*Head of Content and Strategy at The Fabricant*)

In line with the opinions of all of the interviewees, Fulgar's Head of Strategic Marketing stresses the importance of clarity and simplicity when communicating sustainability to make it accessible and straightforward along the supply and value chain (Gonçalves and Silva 2021), from businesses to consumers.

The language between fashion-industry companies collaborating with each other is different from those who work with the public and consumers. They often struggle to dialogue even at this stage...The goal is to convey the messages we said today in the simplest way possible because not everyone deals daily with these issues. I find it very interesting who manages to transfer concepts practically, simply, without artifice. Because the problem is that information passes through so many people that it is transformed when it reaches its destination...Actually, the companies that will make a difference are those that will be able to provide data. Transparency helps the companies to grow. You say where you arrived and where the issues are, you point out these issues, and the value chain starts moving toward them. The more attention is created, and the problem becomes of interest, the more companies are interested in investing and solving it because there is a business opportunity behind it and, of course, an economic value. (*Head of Strategic Marketing, Fulgar*)

In a fragmented supply chain, it is indispensable to acknowledge the ecosystem members' different languages, approaches, and competencies. However, the interviews revealed how language barriers and differences in communication styles can create challenges and misunderstandings that lead to conflicts and hinder progress. The likelihood of disseminating sustainable practices arises, again, from the players' ability to create effective communication strategies and profitable forms of interrelationship (Simatupang and Sridharan 2002). The respondents explore different strategies to align themselves with their interlocutors: getting to know other stakeholders through research and observation, learning and developing shared lexicons, multiplying formats through which sustainability may be communicated, taking advantage of the materiality or virtuality of products and systems that embody sustainability principles, and/or aligning content and tone of voice with the interlocutors' style to make sustainability an accessible and practicable concept for the multiple players in the global fashion system. While navigating these complexities appears extremely challenging given the fashion system's intrinsic layered nature, the testimonies highlight the necessity of establishing practical methods and shared parameters to find productive ways to communicate the state of the art transparently with the ultimate goal to inspire targeted joint actions for the ecosystem players to pursue (da Silva et al. 2021).

Balancing radical and gradual change

The previous subsections have highlighted the complexity of addressing sustainability challenges across various levels, from individual to global. Throughout these conversations, a recurring tension emerged between practical and operational dimensions of sustainability and idealistic aspirations for transformative change. While practical measures are necessary for immediate progress, they often fall short in addressing the systemic root causes of sustainability challenges if not iterated consistently over time. This section addresses this tension by exploring the balance between radical and gradual change in practicing sustainability, as the interviewees' reported.

In my opinion, radicality is the biggest challenge when we think of the fashion system. I believe that in the current state of things, speaking of production, storage methods, unrealistic demand-offer dynamics, and greenwashing, there is a need for a truly radical change. This change certainly involves enormous risks and huge investments. In the future, there must certainly come support from the institutions; there is an urgent need for these radical changes to happen. I see that things evolve much faster than we think and what we used to think. (*Art Director (until July 2021) at Slam Jam, partner in CIRCLE project*)

In this statement, Slam Jam's Art Director calls for a radical change in the unsustainable pace of the fashion industry's production and consumption patterns that require enormous risks, huge investments, and institutional support to limit uncontrolled and deleterious consequences. This sentiment aligns with the views of ACBC's Founder and CSO, who emphasizes the necessity of regulating the material processes and outputs of fashion companies as a top-down endeavor to achieve tangible sustainability outcomes at a systemic level.

Organization, regulations, and a reorientation toward prioritizing sustainability at the product level, rather than exclusively within company practices, are essential. Frequently, particularly in larger corporations, there is significant focus on aligning with internal processes but insufficient emphasis on product development and production. Of course, it takes more time, but that's the urgency because that's where real improvements must be achieved. (*Founder and Chief Sustainability Officer, ACBC*)

By contrast, The Fabricant representative acknowledges that not all players within the fashion ecosystem may be prepared to handle such a radical change, highlighting again the industry's infrastructural disconnection and inherent characteristics as key challenges to implementing extreme operational shifts (Beard 2008).

Many brands come to us with this desire to de-carbonize parts of their industry. They can't de-carbonize it all right now because, realistically, the supply chain is disconnected. You can't change all of it at once. (*Head of Content and Strategy at The Fabricant*)

Similarly, Fulgar's Head of Strategic Marketing stresses the importance of considering that companies progress at varying speeds in terms of innovation and sustainability practices, emphasizing the need to strike a balance between sustainability aspirations, competitiveness, and economic viability.

We have to consider the adaptation time of companies. Manufacturing companies need time to reorganize themselves to be more sustainable and competitive at the same time. The issue of costs and prices is a stumbling block for the entire textile industry. We cannot offer hyper-sustainable products based upon fascinating concepts that can't be realized because they are not economically sustainable. (*Head of Strategic Marketing, Fulgar*)

This recognition reflects the complexity of the fashion industry's sustainability journey, where companies must navigate financial constraints alongside environmental, cultural, and social objectives. Consistent with these reflections, Italian Artisan advocates for an incremental approach to change, whereby industry frontrunners can serve as guides for other stakeholders:

We believe in innovative evolution; I personally believe that disruption sometimes can be dangerous for some industries. Since the beginning we knew we could have a strong impact on the local territories and on the companies of our network. So, we had to consider an approach to build the company that could be sustainable for the ecosystem of our community, too. Evolution can happen with balance: walking beside smaller players, enabling growth, and evolving the traditional industry without disrupting it. (*Founder and President, Italian Artisan*)

This perspective emphasizes the importance of considering that companies are entities situated within wider ecosystems, rather than solo riders, and recognizes the significance of a gradual sustainable development fostered by mutual support relationships and networks. As ACBC's Founder and CSO explains, networks and collaboration are not a nice-to-have condition, but a matter of survival.

The starting point is the survival instinct. As a start-up, you need to find different sources of income. You need to activate in more than one direction, even if probably they're not so coherent at the beginning with your core activity. You need to activate those routes and find coherence later. But it's really for survival. Networks help survival, it's a

rule. So networking, building strong relationships with partners, and helping each other are key to survive.

The interviewee further stresses the value of this condition bringing the company's experience as a B Corporation-certified business.³

The B Corp Certificate is a value. It is more and more recognized by the market players for being a guarantee of seriousness concerning sustainability and social practices...It's a great chance to get in contact with other B Corps, discover other products or services, connect with them and co-create, build networks to help each other. It's about networking, reputation, and visibility. It's valuable. Moreover, it's a challenge because you want to get better in the score once you start, so you try to get better and better. (*Chief Sustainability Officer and Founder, ACBC*)

ACBC's experience points to meaningful informal and formal networks as a key enabler for gaining reputation and visibility as a trustworthy entity practicing sustainability (Eckert et al. 2022). This recognition may attract collaborations and expand the company's impact, inspiring other actors to embrace similar initiatives, as exemplified by Italian Artisan's founder's direct involvement.

In 2018, together with the Organization for Economic Co-operation and Development (OECD), I got hired as a field-peer consultant to explore replicating our systemic approach within national natural clusters from the Mexican government in Hidalgo. The value of what we're doing is internationally recognized, such as by OECD and policymakers. On the other side, we are eager to show our Italian policymakers that these conversations are already happening. We created the first working model, which can be replicable, but it started from the bottom, not from the top. This is a massive challenge for us. (*Founder and President, Italian Artisan*)

The words of Italian Artisan's Founder and President underscore the potential of bottom-up approaches to influence policy discussions and showcase the opportunities and challenges involved in transitioning from grassroots initiatives to top-down practices, both internationally and nationally. Furthermore, it aligns with the aspiration expressed by Fulgar's Head of Strategic Marketing, emphasizing the potential for one company's strong commitment to sustainability to inspire and influence other players, including businesses and consumers, creating a ripple effect throughout the industry.

While initially, the benefit is mainly for the company, the net effect could stimulate other companies to slowly embrace the same approach and generate benefits for the whole community. In this sense,

benefits reach the final consumer, the manufacturing and business ecosystem at large. (*Head of Strategic Marketing, Fulgar*)

In the realm of sustainability, the tension between radical and gradual change is a multifaceted issue that warrants thoughtful consideration. On one hand, while addressing systemic root causes may necessitate radical change, companies may encounter obstacles in implementing such transformations because of supply-chain disconnections, adaptation-time requirements, as well as economic and financial barriers (Beard 2008; Buchel et al. 2022). On the other hand, taking an incremental approach may be more practical, enabling companies to align their internal sustainability goals with external ecosystems. Nevertheless, this approach necessitates active engagement and participation in sustainability practices through the establishment of fruitful partnerships and collaborations. In this context, the visibility of sustainable practices facilitated by well-structured and emerging networks can act as a powerful source of inspiration for others. Over time, these actions have the potential to extend their benefits beyond the boundaries of individual companies, as highlighted by Eckert et al. (2022).

In line with Buchel et al. (2022), our suggestion is that these emerging collaborative approaches hold the potential to create a substantial impact by facilitating the widespread adoption of sustainable practices throughout the entire supply and value chain (Simatupang and Sridharan 2002). This impact should be realized across multiple levels, encompassing diverse stakeholders, including both smaller and larger players, agile innovators and incumbent firms, and cross-sectoral partnerships, public institutions and universities, policymakers, and consumers (Williams et al. 2019). Finally, based on the insights shared by the interviewees, it becomes evident that there is a perceived urgent requirement for institutional and governmental policies that align with sustainability objectives while accounting for the existing informality and fragmentation of the global fashion system.⁴ Policies may play a crucial role in providing incentives to support both established companies and those lacking the necessary resources to align with sustainability objectives. In doing so, they may specifically foster the establishment of innovative networks and collaborations to jointly address the ever-challenging transition toward sustainable development of the global fashion system.

Conclusion

This study aimed to explore how emerging and established firms within the fashion industry

perceive and navigate opportunities and challenges related to sustainable practices, through the lenses of collaboration and networking. Through semi-structured interviews with key players in the supply and value chain, we gained valuable insights into the multifaceted nature of sustainability and the strategies employed by frontrunners in jointly pursuing sustainability objectives.

The findings highlight the complexity of defining sustainability, acknowledging the diverse perspectives among participants. A shared paradigm of continuous learning, responsibility, and objective refinement within the ecosystem emerged, emphasizing the importance of a WIP approach. A central and transversal theme that emerges from their discussions is the recognition of dialogue, cooperation, and shared objectives as a collective, rather than an individual effort. In this context, the interplay of introspection, collaboration, and iteration was identified as a crucial factor in embracing sustainable practices. Organizations must critically assess their capabilities and commitment to sustainability while seeking complementary resources through collaboration. An iterative approach allows for experimentation, enhancing reputation and expanding the portfolio of experiences. In this scenario, collaborations can be highly beneficial for companies new to the concept of sustainability since, by engaging in collaborative efforts, they can gain a deeper understanding of it, actively practice sustainable initiatives, and expose their audience to the importance of sustainability.

For frontrunners in the field, consultancy, collaboration, and networking focused on sustainability-driven projects offer a range of perceived benefits. These initiatives can expand their portfolio of experiences in sustainability, allowing them to further explore innovation and develop their capacity. Moreover, by engaging with other players, frontrunners can share their sustainable practices, differentiate themselves from competitors, and create multiple revenue streams. Additionally, these endeavors can enhance their visibility and reputation, attracting new potential collaborators and opening doors to further opportunities. Effective communication through language alignment was recognized as essential in a fragmented supply chain, requiring the development of shared vocabularies, multiple communication formats, and transparency. Overcoming language barriers and aligning communication preferences among stakeholders appear crucial to inspire joint actions and disseminate knowledge. Balancing radical and gradual change was recognized by the study participants as a necessity for effectively contributing to the fashion industry's sustainability transition. While radical transformation was seen as

crucial to address systemic root causes, practical challenges such as supply-chain disconnections and economic barriers can hinder implementation. Incremental approaches, supported by collaborative networks, were proposed as viable paths to drive widespread adoption of sustainable practices.

The interviewees are neither academics nor politicians, but entrepreneurs and industry professionals. Their discussions revealed a dual nature: a problem-solving approach to practical issues and a personal sensitivity to global sustainability concerns. As industry players, each participant demonstrated a pragmatic approach to considering how concrete corporate actions can either promote or hinder sustainable practices at various levels, including products, processes, and ecosystems. As individuals, they tended to abstract sustainability principles as higher-level concepts that need to be acknowledged and pursued. However, a key question arises regarding the adequacy of decentralized motivation in driving substantial change. The study participants acknowledged the limitations of individual actions and emphasized the importance of institutional and governmental policies in supporting sustainability goals through direct interventions. These interventions included incentivizing companies, fostering collaborations, providing financial support, combining bottom-up and top-down approaches, and establishing operational guidelines and regulatory frameworks. However, to ensure a successful transition toward sustainable development, it is essential that policymakers comprehensively consider the informality and fragmentation of the fashion system.

While it is crucial to recognize the limitations of this study, such as its non-generalizability and the questions that it opens up for further research, validation, and extension, the insights gleaned from the participating entrepreneurs offer valuable understanding of the intricate dynamics of sustainability within the fashion industry. This knowledge provides important lessons that can guide future research and inform industry practices.

Notes

1. The interviews with Italian Artisan and The Fabricant were held in English while those with ACBC, CIRCLE project partners, and Fulgar were conducted in Italian.
2. In this context, kilometer zero refers to the concept of sourcing materials and production processes within a close geographic radius.
3. B Corp certification is a model gaining recognition as a guarantee that a company upholds exceptional standards of social and environmental performance, corporate responsibility, and public transparency

while striving to balance both profit and purpose (Diez-Busto, Sanchez-Ruiz, and Fernandez-Laviada 2021).

- See, for example, the European Commission's "A Green Deal Industrial Plan for the Net-Zero Age" (2023) based on the establishment of a streamlined regulatory framework, ensuring easier access to adequate funding, fostering the development of skills, and promoting open trade for supply-chain resilience.

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