



Partner selection strategies of SMEs for reaching the Sustainable Development Goals

Paola Castellani¹ · Chiara Rossato¹ · Elena Giaretta¹ · Alfonso Vargas-Sánchez²

Received: 3 July 2022 / Accepted: 10 March 2023
© The Author(s) 2023

Abstract

The paper aims to investigate the characteristics of SMEs' partners that can better contribute to the achievement of the SDGs. Given the explorative nature of this research, a qualitative methodology is adopted, with a longitudinal case study employed as the research method. The Wråd case study confirmed that SMEs can contribute to the achievement of the SDGs by developing partnerships with multiple stakeholders. In addition, this research revealed that the characteristics of the SMEs' partners can be referred to the four following dimensions: economic, environmental, social and purpose. Furthermore, it proposed that quality utility value, technique level, profitability are the subdimensions of the economic dimension and that resource consumption efficiency, pollution production, energy efficiency, environment management system and environment equipment and facilities are the subdimensions of the environmental dimension. This research expressed also that public health, employee engagement, brand reputation and local communities' influence are the subdimensions of the social dimension. Finally, it underlined that sustainability-oriented awareness development, sustainable orientation, sustainable collective culture, proactive managerial skills, organisational learning and proactive and innovative leadership are the subdimensions of the purpose dimension. In line with previous studies underlining the importance of increasing the TBL dimensions, this study suggests a further extension of this theory with the 'purpose' dimension. This study highlights the importance of developing a vision supported by a social awareness of the problems that need to be addressed and that transcend the fashion sector. Further researches could explore a larger sample of SMEs operating in different businesses and the point of view of the SME's partners.

Keywords SDGs · TBL dimensions · Partnership · Multiple stakeholder · Social awareness · Long-term competitiveness

Mathematics Subject Classification 91C99

✉ Paola Castellani
paola.castellani@univr.it

Extended author information available on the last page of the article

JEL Classification L21 · Firm objectives, organization and behavior · Business objectives of the firm

1 Introduction

Rising social inequality and the progressive degradation of the natural environment render sustainable change of the economic system an urgent priority (Geissdoerfer et al. 2018). Continuing on the journey towards sustainable development—namely, ‘development that meets the needs of the present without compromising the ability of future generations to meet their needs’ (World Commission on Environment and Development 1987, p. 43)—is not easy but increasingly indispensable. As per Robert Solow (1992, p. 15), ‘the duty imposed by sustainability is to bequeath to posterity not any particular thing [...] but rather to endow a standard of living at least as good as our own and to look after their next generation similarly’.

Not just national governments and global institutions (Bebbington and Unerman 2018) but all businesses are called to integrate sustainability into their management practices (e.g. Schulz et al 2011; Bocken and Short 2021; de Villiers et al. 2021), which is particularly relevant in light of their specific resources and skills such as innovative capability (Porter and Kramer 2011; Di Vaio et al. 2020; Rubio-Andrés et al. 2022). Given that they contribute to economic growth, the generation of employment and minimisation of damage to the environment (e.g. Schaltegger and Wagner 2011; Bocken and Short 2021), business activities have effects not only on the economy but on societal development and the generation of environmental benefits. As sustainable development agents—namely, players able to contribute to resolving existing socio-environmental problems (e.g. Schaltegger et al. 2016; Youssef et al. 2018) and, thus, to achieving higher levels of sustainability—an increasing number of businesses is strategically adopting and operationally implementing in their processes (e.g. Ordonez-Ponce et al. 2021; Pizzi et al. 2021; Agrawal et al. 2022; Bonfanti et al. 2022; Dana et al. 2022) the guidelines included in the 17 Sustainable Development Goals (SDGs) proposed by the 2030 Agenda of the United Nations in 2015 (e.g. United Nations 2020; Horne et al. 2020; van Zanten and van Tulder 2021). The SDGs—which build on the Millennium Development Goals—are intended to guide sustainability decisions and, in this sense, to address challenges common to all countries by inviting renewed global partnerships to foster transformative changes in favour of the future of the planet and its people (Chopra et al. 2022).

This topic is attracting both academic and practitioner interest worldwide, regardless of level of country development. Previous studies have focused mainly on larger (e.g. Mio et al. 2020) and multinational (e.g. ElAlfy et al. 2020; Ordonez-Ponce and Talbot 2022) enterprises, and have paid little attention to small and medium enterprises (SMEs). However, SMEs constitute the majority of organisations worldwide and their combined impact can create disruptive effects in economic, social and environmental terms. As argued by Smith et al. (2022, p. 113), ‘this relevance opens up the need for a closer look at SMEs’. Past research has revealed that SMEs do not have the resources or potential to pursue the SDGs alone (e.g. Stoian et al. 2017);

the SDGs cover multiple activities across the world and no one sector could achieve these goals acting alone. Rather, SMEs act collectively by activating multistakeholder partnerships (e.g. Whittaker et al. 2016; Russo and Schena 2021; Journeault 2021)—considered one of drivers for implementing sustainable practices (e.g. Cantele and Zardini 2020). Previous studies have also highlighted the strategic and social motives that drive the formation of partnerships (Ordonez-Ponce et al. 2021), but have neglected to examine how SMEs choose their partners with the aim of better achieving the SDGs. In this regard, past research has already identified different evaluation criteria via which to select specific supply chain partners (Ho et al. 2010; Kannan 2018; Zhou et al. 2018), but without highlighting their characteristics. In addition, no previous studies, to the best of our knowledge, have outlined the characteristics of further SMEs' partners, such as local government, education institutions and non-profit organisations, that enable an SME itself to more effectively pursue sustainable development. Thus, the following research question emerges: What should SMEs' partners have to contribute to the achievement of the SDGs?

In seeking answers to this question, this research investigates the characteristics of SMEs' partners that better enable them to contribute to the achievement of the SDGs. Given the explorative nature of this research, a qualitative methodology is adopted, with a longitudinal case study employed as the research method.

2 Theoretical background

The 2030 Agenda for Sustainable Development proposed by the United Nations in 2015 recognises the specific relevance of private organisations in contributing to global development and sustainability challenges through the achievement of the SDGs (United Nations 2015). Indeed, the private sector can bring to bear specific expertise and knowledge, managerial capacities, financial resources and high risk appetite to contribute to this global aim (Berrone et al. 2019; Stewart et al. 2018). In this context, the SDGs framework is an expression of the social, environmental and economic impacts of business activities (de Villiers et al. 2021), while the triple bottom line (TBL) theory (Elkington 1994) explains how businesses evaluate their performance from a sustainability perspective. More specifically, business management should pay equal attention to the pursuit of profit (economic dimension), the improvement of people's lives (social dimension), and the protection of the planet (environmental dimension) to become sustainable entrepreneurship (Fellnhöfer et al. 2014). Some scholars, deepening the TBL theory, have also proposed modifications or extensions of its original elements. In particular, some academics have replaced 'profit' with 'prosperity' to indicate the economic benefits for the firm and the socio-economic wellbeing of workers and communities (Stahl et al. 2020; Wheeler and Elkington 2001), while others propose a quadruple bottom line theory, by adding 'principles/values' (Larner et al. 2017; Raiborn et al. 2013), 'technology' (Arukala and Pancharathi 2020) or even 'prosperity' (e.g. Hamidi and Worthington 2021) as further dimensions of the TBL.

Previous studies have investigated the role of businesses in achieving the SDGs by focusing, on the one hand, on multinational enterprises or large companies for

their great contribution to global sustainable development (e.g. Kolk et al. 2017; Topple et al. 2017; Burritt et al. 2018; van Zanten and van Tulder 2018; Ordonez-Ponce and Talbot 2022; Ordonez-Ponce and Weber 2022), and, on the other hand, on SMEs, although their contribution may at first appear inferior (Schulz et al. 2011). In fact, SMEs are particularly interesting to examine from the perspective of SDG achievement, for two main reasons: (1) they form the foundation of most national economies (Crick and Crick 2021), accounting for 90% of all businesses and 60% to 70% of employment worldwide (United Nations 2020), and are thus significant in terms of quantity; and (2) they have limited economic, social and environmental impact as singular entities, but their combined impact may exceed that of large enterprises when they are considered in aggregate (Smith et al. 2022). Accordingly, focusing on how SMEs are engaged in achieving the SDGs is a topic of much current interest.

In this context, more scholars have examined the leading role of SMEs in meeting global sustainability goals (Oppong 2022). Specifically, several academic studies have been conducted in the last five years to examine the obstacles that SMEs encounter in achieving the SDGs (Álvarez Jaramillo et al. 2019; Cantele and Zardini 2020; Govindan et al. 2020; Chopra et al. 2022) and the strategic alternatives suitable for overcoming these obstacles. In this last regard, the adoption of circular business models (e.g. Geissdoerfer et al. 2017; Kristoffersen et al. 2020; D'Amato et al. 2020; Agrawal et al. 2021; Patwa et al. 2021; Virmani et al. 2022), the activation of partnerships and strategic alliances with different organisations (Prashantham and Birkinshaw 2020; Jiménez et al. 2021; Russo and Schena 2021; Journeault et al. 2021; Ordonez-Ponce et al. 2021) as well as the promotion of technological innovation (Pugliese et al. 2022; Jahanshahi et al. 2020; Fernández Fernández et al. 2018; Zhang et al. 2022; Chege and Wang 2020), digital technology (Dana et al. 2022) and consequent business model innovation (Åström et al. 2022) have emerged as the key strategic choices adopted.

Other scholars have studied the concrete actions of SMEs to achieve the SDGs. From research hitherto conducted, it emerges that SMEs play multiple roles depending on the geographical context and industry examined. In fact, institutional environments may differ significantly in terms of effect on entrepreneurship (Khanin et al. 2022). In developed economies, SMEs mainly play the role of innovation promoters, across the three following fields: (1) at a technological level, they encourage the development of new solutions capable of improving environmental protection (Pugliese et al. 2022); (2) at a management level, they favour the evolution of the business towards forms of circular economy (Šebestová and Sroka 2020) and the creation of tools for self-assessment of sustainability achieved by an individual company (Jiménez et al. 2021), and also allow the creation of shared value in the social and financial dimension (Rubio-Andrés et al. 2022); and (3) at an organisational and cultural level, they develop forms of partnership among companies that are able to overcome the lack of skills of a single firm (Russo and Schena 2021; Lopes de Sousa Jabbour et al. 2020). In contrast, in emerging economies, SMEs are drivers of sustainable economic growth (Shaji and Apoorva Vikrant 2020; Oppong 2022) and stimulate greater awareness of both environmental safeguards and preservation and improvements of people's living and working conditions (Altaf 2019). Table 1

Table 1 The role of SMEs in achieving the SDGs

References	Geographical context	Industry examined in the study	Purpose of the research	Role of SMEs in achieving the SDGs
Pugliese et al. (2022)	Italy	Dairy	To identify a technological solution able to reduce waste produced along the dairy supply chain and to improve its environmental impact	To promote technological innovation for environment
Russo and Schena (2021)	Italy	Manufacturing	To study the phenomenon of strategic alliances between SMEs as a strategic choice to achieve economic competitiveness and sustainability	To spread a culture of collaboration among SMEs to overcome the lack of skills of a single firm
Šebestová and Sroka (2020)	Czech Republic and Poland	Manufacturing	To compare the Czech and Polish approaches to the circular economy as a possible way to achieve the SDGs	To engage in the adoption of circular business models to enhance sustainability of commercial partnerships
Jiménez et al. (2021)	Basque Country, Spain	Furniture	To provide cluster-based SMEs with a framework to facilitate the uptake of the SDGs through a cluster network model	To develop a sustainability management tool within a cluster
Rubio-Andrés et al. (2022)	Spain	Services, manufacturing, retail, construction	To propose a measuring and governance model to assess the benefits of creating shared value in SMEs	To promote management innovation that allows the creation of shared value in the social and financial dimensions
Lopes de Sousa Jabbour et al. (2020)	Asia	Manufacturing	To identify factors that contribute to Asian manufacturing SMEs' pursuit of sustainable development	To invest more in innovation and entrepreneurial orientation to improve economic performance To establish partnerships with public and private organisations

Table 1 (continued)

References	Geographical context	Industry examined in the study	Purpose of the research	Role of SMEs in achieving the SDGs
Shaji and Apoorva Vikrant (2020)	Pune, India	Manufacturing	To study, document and map small but effective sustainable development initiatives by MSMEs	To adopt the stakeholder approach to manage partners and root leadership in the values of ethics and sustainability shown in relations with customers
Altaf (2019)	India	Manufacturing	To analyse the growth and contribution of MSMEs in terms of sustainability practices	To support economic growth, employment creation, poverty and inequality reduction and establish partnerships among SMEs
Nguyen and Ngo (2022)	Vietnam	Manufacturing	To examine the influence of technological progress as well as environmental, social and governance responsibilities to SDGs To investigate the moderating role of supply chains in the relationship between technological advancement and the SDGs	To invest in technological progress as well as to take environmental and social responsibilities to SDGs To operate so that sustainability guides all operators in the supply chain
Oppong (2022)	Emerging economies (India) and Sub-Saharan Africa	Manufacturing	To study the propensity of SMEs to disclose their commitment in terms of sustainability and achievement of the SDGs within Sustainability Reporting (SR)	To disclose the commitment to sustainable development and achievement of the SDGs within SR to improve relations with stakeholders and increase sustainable partnerships

Table 1 (continued)

References	Geographical context	Industry examined in the study	Purpose of the research	Role of SMEs in achieving the SDGs
Chege and Wang (2020)	Tharaka-Nithi County, Kenya	Agribusiness	To identify the impact of technology innovation and environmental sustainability strategies on performance	To promote technological innovation and employee participation in environmental protection practices to enhance firm reputation to stakeholders and partners and so economic performance

highlights the main scientific contributions on this topic, by providing the purpose of each piece of research and the role of SMEs in the achievement of the SDGs, in addition to the geographical context and the industry analysed.

This overview of the main themes regarding the role of SMEs in achieving the SDGs highlights not only that SMEs play a crucial role in this regard but also that they can better pursue this goal when they activate partnerships (Joseph and Kulkarni 2020; Clarke and Fuller 2010). SMEs operate in a partnership context when a group of stakeholders collaborates to achieve common socio-environmental goals by adopting a 'pluralistic approach' aimed towards addressing societal needs (Glasbergen 2007, p. 1). The success or failure of the partnership depends on the profile and performance of its key players. Accordingly, the selection of partner organisations is essential not only from a strategic but also from a sustainability perspective. In this regard, academics and practitioners have widely debated the issue of identifying the criteria for evaluating and selecting partners (Dickson 1966; Weber et al. 1991; Ho et al. 2010; Wu et al. 2020) and have formulated an initial set of economic criteria that includes attention to environmental (Kuo et al. 2010; Hsu et al. 2013) and social (Awasthi et al. 2018; Kannan 2018; Tseng et al. 2018; Feng et al. 2017) sustainability. Zhou et al. (2018), in particular, revealed that the evaluation of a partner requires joint analysis of economic, environmental and social commitment. More precisely, they elaborated a framework based on these three dimensions with specific reference to the bottom of the supply chain, examining sustainable supply chain practices for a recycling partner evaluation theme. For each dimension revealed, they highlighted specific selection subcriteria to evaluate sustainable recycling partners.

Previous studies highlight how the role of SMEs is fundamental in pursuing the SDGs, and how SMEs can achieve these more effectively by working in partnership. In turn, the success of a partnership largely depends on the characteristics of the partners (Ordóñez-Ponce and Clark 2020). Therefore, it becomes necessary to investigate the characteristics of SMEs' partners that can better contribute to the achievement of the SDGs.

3 Method

3.1 Research design

This study has an explorative nature and adopts a qualitative methodology through an abductive approach that supports an iterative movement between theory and data to better grasp the empirical phenomenon (e.g. Dubois and Gadde 2014; Ketokivi and Choi 2014). We chose a case study strategy considering the need to understand a phenomenon in its real-life context (Yin 2003). This method is useful when the aim of the research is to survey 'how' and 'why' aspects of a case, particularly when knowledge about the issue is scarce (Beverland and Lindgreen 2010) and for theory building purposes (Eisenhardt 1989). Specifically, we selected the longitudinal case study method to gain 'a deep understanding of the actors, interactions, sentiments and behaviours occurring for a specific process through time' (Woodside 2010, p. 6). To this end, we developed an analysis strategy in three phases, and from the focal firm's perspective, to

analyse fundamental characteristics of SMEs' partners relevant to the achievement of the SDGs. We used an interview process—namely, interviews conducted at three different times—as the longitudinal case study requires (Halinen et al. 2012, 2013).

We selected the interview method because it enables the building of realistic observations of the case (Snow and Thomas 1994). The data collection process also included the analysis of the company website and social media, and press releases and articles in the sustainable fashion press to support and triangulate the findings (Yin 2017) and to confirm the validity and reliability of the research (Creswell 2014). Content analysis was used to support the examination of the data to detect themes (dimensions and sub-dimensions of the characteristics of SMEs' partners) and obtain new content. Next, we describe the analysis context and the case study in detail.

3.2 The analysis context

The analysis context is the fashion industry, which it is recognised globally as an important sector in light of the value it creates. More precisely, it generates economic value (equal to more than US\$1.3 trillion) and social value (e.g. employing over 300 million people along the value chain and supporting employment in countries with low income) (Ellen MacArthur Foundation 2017a). However, from the environmental point of view, the fashion industry exerts strong pressures on resources and produces pollution and degradation of the natural environment and its ecosystems (Riba et al. 2020). As stated by the National Resources Défense Council in 2016, the fashion industry is one of the most polluting industries in the world (Gabriel and Luque 2020; Hemantha 2021). It uses around 60% of total global textiles, including numerous natural and non-renewable resources, and contributes to around 10% of global carbon emissions and 20% of water waste (Abdelmeguid et al. 2022; Mintel 2009). Moreover, only 1% of the materials used in the production process for clothes are recycled, even though around 95% could be (Atstja et al. 2021). Thus, the fashion industry exerts a negative impact on the natural environment, in line with its high energy consumption, high water, chemicals, dyes and finishes usage, and high greenhouse gas emissions (Mintel 2009).

It also creates negative social impacts at local, regional and global levels. Indeed, short lead times and cheap clothes are only made possible by exploitation of labour and natural resources (Fletcher 2007). Ongoing climate change and conflicts over decreasing natural resources have begun to change the approach to the production and consumption of fashion, transforming sustainable fashion business models from 'niche' to a necessity for the whole industry (Chandak 2014). Consequently, the industry is facing increasing pressure to fulfil social and environmental responsibilities along with achieving economic goals (Arrigo 2015; Lewittes 2019).

3.3 The case study

The case selected for this study is Wråd, an Italian fashion design company combining innovation and sustainability. Wråd emerged in 2015 on social media as a community, and in 2016 transformed into an innovative startup thanks to the collaboration of partners. The brand was launched by three young professionals (Matteo Ward,

Victor Santiago and Silvia Giovanardi). In their previous work at large fashion companies in the retail sector, the three co-founders learned the true cost of fashion and its impact on the environment, society and health. They also noted the low level of awareness of fashion companies about the alarming effects of their activity. Accordingly, they created their startup driven by their vision of making the world a better place through sustainable innovation. To this end, the company was born with the mission statement of inspiring the market to express intangible values through tangible objects, to catalyse the rise of a new order of sustainable action. In alignment with its mission, Wråd invests in three symbiotic levels of action through design: (1) raising awareness of the true cost of fashion (education), (2) developing upcycling technologies (innovation) and (3) offering market products to inspire a conversation around socio-environmental values and to provide people and retailers with a way to communicate these products, amplifying their identity (communication).

This case was chosen as particularly interesting because it is recognised all over the world as following the principles of sustainability and, especially, of the circular economy (Montalto 2019). It offers educational formats on the fashion sector (Deias 2021) and develops partnerships mainly with fashion brands, suppliers and retailers, but also with local, national and international public and private institutions, educational institutions, media, non-profit cultural and artistic organisations such as Cittadellarte Fashion B.E.S.T. (an important laboratory for the design, development, production and distribution of ideas and products in the textile and fashion design sectors), and global non-profit movements such as Fashion Revolution, which is strongly committed to the chosen path of sustainability.

3.4 Data collection

To collect primary data, we interviewed key informants from Wråd; namely, the co-founder and current chief executive officer, the sustainability specialist manager and the communication and consulting manager. Their selection was determined by their role within the company in terms of achieving the SDGs and their ability to explain the processes underlying the company's sustainability and innovation practices.

A three-stage interview process was carried out. The first round of interviews occurred in December 2018, the second in January 2020 and the third in October 2022. In all these stages, we followed the long-interview approach (McCracken 1988; Woodside 2010), which involved a face-to-face interview in the respondent's 'life space' during which he or she was asked open-ended, semi-structured questions and to elucidate emerging issues. In line with such procedure, a draft of the questions was sent by e-mail to the respondents in advance. The interview guide including the full list of questions is reported in Table 2. The interviews were conducted in a flexible manner, by exploring the various aspects of business management with respect to the personal inclinations and profiles of the interviewees to allow the investigated topics to emerge spontaneously from their answers. The two interviewers played a mainly strategic role of listening and interpretation, and tried to avoid potential sources of distraction. The technique used to collect data ensured the validity and reliability of the research (Yin 2003).

Each interview lasted 60–90 min. During the data collection, the researchers encouraged informants to provide concrete examples to support their comments and to describe some aspects in more detail. In the three-stage interview process, the informants were the same people, the interviews were conducted in the same place and the interviewees were asked the same questions.

3.5 Data analysis

Each interview was audio-recorded and fully transcribed verbatim (Miles and Huberman 1994). Transcriptions were then sent back to the interviewees and they were asked to verify whether their opinions had been correctly reported.

The examination of the data was carried out through content analysis using the NVivo 11 software. The approach recommended by Gioia et al. (2013) was followed for data analysis and interpretation. This approach is useful for avoiding information loss by encoding the data corpus (informant entries) as first-order codes before aggregating them into second-order themes (concepts abstracted from first-order categories) and finally identifying the aggregated dimensions (aggregate dimensions). Coding was undertaken conservatively, referring only to what the data explained. Comparison of the codes allowed us to identify similarities and differences, and subsequently reduce the number of codes. Specifically, each researcher separately coded first-order concepts, performed consistency checks and accurately coded all textual data. Next, the researchers jointly compared their coding schemes. Any discrepancies that arose during the discussion were reconciled; therefore, a shared understanding was reached and a unique coding scheme was subsequently identified. Following this, the connections between the concepts were identified to develop the second-order themes, elaborated on a more abstract level. The researchers then assembled the emerging themes related to the concepts into aggregate dimensions. More precisely, with specific reference to the characteristics of the partnerships, the number of codes was refined from 60 first-order concepts to 18 second-order topics, and then to four aggregate dimensions. The full list of codes is shown in Tables 3, 4, 5 and 6, presented below.

Table 2 Interview guide

Questions

What is Wråd's mission?

How do you achieve this mission?

What are the main partnerships developed by your company?

What projects have been developed with your partners to achieve the SDGs?

What benefits have these projects provided?

What characteristics of your partner allow you to work well to better achieve the SDGs together?

Table 3 Analysis of the characteristics of SMEs' partners: economic dimension

First-order CONCEPT	Second-order THEMES	Aggregate dimension
<p>“The partnership with Alisea – creator of the Perpetua graphite pencil – allows the reuse and recycling of graphite, giving life to a circular economy process”</p> <p>“Together with Alisea, we have recycled over 16 tons of graphite powder in three years”</p> <p>“We managed to reuse the mineral dyeing process of a technique handed down by the inhabitants of Monterosso Calabro, where the memory of an ancient Roman custom that used natural graphite to dye fabrics is still alive, but instead of natural graphite, we recover graphite powder that is non-toxic and without waste from the production of electrodes”</p> <p>“The partnership with Tecno E.D.M. srl, which has invested in machinery and functional resources, has been invaluable in understanding how to dye with a powder”</p> <p>“The partnerships activated have generated synergistic relationships between companies possessing technological know-how and operating in different interconnected sectors for the development of new fabrics”</p> <p>“g_pwdr@ technology, developed by our R&D partner Alisea, is an innovative dyeing technique based on the recycling of upgraded graphite powder, enabling all lovers of gray clothing to challenge the status quo”</p> <p>“Graphic-Tee is the result of an ancient graphite dyeing technique that protects the skin from toxic substances and saves this precious mineral from ending up in landfills”</p> <p>“We are collaborating with I TrueID to apply an innovative technology that will allow us to attribute a unique digital DNA to each individual product, giving anyone immediate access, via smartphone, to the information we want to convey about the product”</p> <p>“With our global partners we were able to reach overseas markets, both in North America and Japan”</p> <p>“We and our partners are aligned on investing in slow capital”</p> <p>“Thanks to our partners Yoox and Alisea, we have entered a market that we otherwise would not have been able to penetrate”</p> <p>“We and our partner Alisea have increased the market attractiveness of our products by selling them together”</p>	<p>Quality utility value</p> <p>Technical level</p> <p>Profitability</p>	<p>Economic dimension</p>

Table 4 Analysis of the characteristics of SMEs' partners: environmental dimension

First-order CONCEPT	Second-order THEMES	Aggregate dimension
<p>"Our first original product, the Graphi-Tee t-shirt, comes from the Perpetua pencil of our partner Alisea, using recycled graphite powder"</p>	<p>Resource consumption efficiency</p>	<p>Environmental dimension</p>
<p>"g_pwdr@ technology is an innovation, inspired by tradition: the Romans used to rely on it to dye their own fabrics thousands of years ago. We and our partners asked ourselves how we could transform this modern-day waste into the raw material of an innovative and circular supply chain"</p>	<p>Pollution production</p>	
<p>"In the fashion sector, almost 1,600 chemicals are used in the treatment and finishing of fabrics, with a very high environmental impact"</p>		
<p>"Graphite is today wasted in vast quantities by the tech industry, as a byproduct of the production of electrodes"</p>		
<p>"On average, people use their clothes for 1–3 Instagram posts and then throw them away. This results in very high environmental damage"</p>		
<p>"There are companies that have a high number of returns generating an environmental impact and very high CO₂ emissions, due to the widespread custom among some young people to buy T-shirts, take a photo to post on Instagram and then return the product"</p>		
<p>"Thanks to the innovative and sustainable technologies created and applied in conjunction with our partners, we have reduced the consumption of water and energy in the production processes"</p>	<p>Energy efficiency</p>	
<p>"g_pwdr@ technology allows us to reduce the use of chemicals to zero in the fabric production processes"</p>	<p>Environmental management system</p>	
<p>"Our supply partners provide all required certifications and traceability of their production and manufacturing activities. For example, our fabric suppliers use a Global Organic Textile Standard (GOTS)-certified yarn"</p>		
<p>"For every single product, we have the certificates to guarantee what we say. Otherwise we do not activate the collaboration. For example, we blocked a Capsule Collection for this reason: we had developed mint fibre, a beautiful product with a spectacular hand feel, that was also requested for an exclusive Capsule in Yoox Net-a-Porter, but our supplier was unable to supply us with the mint traceability"</p>		
<p>"In collaboration with our partners, we are integrating blockchain technology to develop traceability within the supply chain"</p>		
<p>"Together with our partners, we have created a circular supply chain in Italy"</p>		<p>Environmental equipment and facilities</p>

Table 5 Analysis of the characteristics of SMEs' partners: social dimension

First-order CONCEPT	Second-order THEMES	Aggregate dimension
<p>"Graphite is a mineral that protects against electromagnetic waves and is a conductor of electricity and heat. With our partners, we aim to optimise its properties for the development of fabrics potentially capable of protecting the human body from exposure to electromog, considered one of the main causes of many neurological problems, sleep disorders, anxiety and nervousness, and also often considered due to an increase in the suicide rate"</p> <p>"Thanks to the innovative and sustainable technologies developed and applied with our partners, we are able to guarantee the safety of the skin, with significant human, social and environmental benefits"</p> <p>"Together with our partners, we want to restore value to the human resources employed in the supply chain. The 'Who Made My Clothes' campaign by Fashion Revolution, one of the strongest social movements we collaborate with, supports brands that start by saying 'These people made my clothes.' This manifesto is part of our DNA"</p> <p>"We work cohesively as a team, combining high competence, experience and versatility with a view to improving research and development and innovation processes"</p> <p>"Both we and our partners support the update of our team members and we note that they have a strong sense of belonging to the company's community"</p> <p>"We support our team members to develop projects from conception to implementation ... aiming at strengthening internal and partnership engagement"</p> <p>"We and our partner Alisea are achieving better business results by selling our respective products together because the consumer understands that our t-shirt Graphi-Tee comes from the Perpetua Pencil's graphite recycle and that the Perpetua Pencil inspired the t-shirt Graphi-Tee"</p> <p>"Our product is no longer just a t-shirt or a jacket, but an innovative tool to communicate our sustainability-oriented values and increase trust in the brand"</p> <p>"In collaboration with our partners, we design an ad hoc communication plan on the sustainable value of our products with positive effects on brand awareness"</p> <p>"We try to make our supply chain transparent so that it represents an additional guarantee on the commitment of the brands involved in terms of sustainability"</p> <p>"With several institutional partners (national and international), we have shared innovative and effective digital communication projects on the sustainability of fashion that have provided us with high visibility and have attracted the attention of global companies in the sector (from logistics to fabric development), institutions, the public and consumers"</p>	<p>Public health</p> <p>Employee engagement</p> <p>Brand reputation</p>	<p>Social dimension</p>

Table 5 (continued)

First-order CONCEPT	Second-order THEMES	Aggregate dimension
<p>“In collaboration with our partners, we design communication projects aimed at developing greater social awareness of the need to act in a sustainable way”</p> <p>“On Instagram, we have tried to communicate the real impact of the fashion industry through images. First of all, a digital community has been created, small but with a high engagement rate, from 10 to 20% on our posts, well above the average in the fashion industry”</p> <p>“With some partners such as Fashion Revolution or Eco-Age, we have created an educational project on sustainability for schools”</p>	<p>Local communities’ influence</p>	

Table 6 Analysis of the characteristics of SMEs' partners: purpose dimension

First-order CONCEPT	Second-order THEMES	Aggregate dimension
<p>“We were born as an Instagram page to generate awareness about the real cost of the fashion industry on an environmental and social level. Our partners share this communication approach with us, which is now widespread throughout the network”</p> <p>“The product offered to the market is not merely a t-shirt, another pair of jeans or another sweat-shirt that nobody needs, but a form of personal investment to move towards an educational path of sustainable development”</p> <p>“We don't sell t-shirts and jackets; we sell sustainability awareness through our products”</p> <p>“We intend to make it clear to global companies, which produce, for example, hundreds of thousands of sweaters a month, that with our technology they can do it by reducing water consumption by 97% ... also achieving an economic benefit ... then we all win”</p> <p>“With our partner we have reimagined this box containing 2,000 years of history for a more sustainable future”</p> <p>“In 2017, together with our partner Yoox, we created a communication campaign and an exclusive Capsule Collection called WRADoscope, spread all over the world. We communicated sustainability to a very specific audience and attributed a function, a purpose to the product. For each zodiac sign, we created a functional communication for a more sustainable lifestyle. The horoscope communicated how to potentially reduce your environmental impact and be a better person next year”</p> <p>“We work with our partners considering fundamental attention to the scarcity of natural resources and respect for human value”</p> <p>“We work together with our partners to challenge the status quo in order to find solutions geared towards sustainable development”</p> <p>“Learning is a key driver for capturing weak signals and for intercepting changes and needs occurring in society and in the environment”</p> <p>“Social sustainability is pivotal in our company's and partners' strategy, which consists of a set of core values to spread and promote a culture of sustainable innovation”</p>	<p>Sustainability-oriented awareness development</p>	<p>Purpose dimension</p>
	<p>Sustainable orientation</p>	

Table 6 (continued)

First-order CONCEPT	Second-order THEMES	Aggregate dimension
<p>“One purpose of the network is to catalyse, starting from the product, positive change in the fashion industry and in other industries, so that they become promoters of responsible action”</p>	Sustainable collective culture	
<p>“One purpose of our network of partners is to potentially develop technologies that other companies can use in the future”</p>		
<p>“There is a shared vision between company members, partners and consumers regarding the need to solve complex environmental, social and sustainable economic issues”</p>		
<p>“We and our partners worked to make our supply chain transparent in every area”</p>		
<p>“The network is supported by strong managerial skills in terms of communication. Everyone wants to talk about our history. Therefore, we are able to obtain – at essentially zero cost – content and high media coverage”</p>	Proactive managerial skills	
<p>“Creativity and non-linear thinking are developed through the relationships we have established with highly qualified art directors, fashion designers, fashion photographers and sustainability managers”</p>		
<p>“We spent years figuring out how to effectively communicate the message associated with our products to the market”</p>	Organisational learning	
<p>“By working closely with our partners, we have learned that it is necessary that communication excites and inspires, and is deeply interesting”</p>		
<p>“In our network, entrepreneurs focus on sharing strategies and knowledge, are open to discussion and dialogue, are innovation-oriented and seek to encourage internal and external connections and cohesion. They practice a visionary leadership style to develop the skills of others”</p>	Proactive and innovative leadership	
<p>“Our partners’ leaders constantly develop new, sustainable values co-created inside and outside the organisations”</p>		
<p>“We and our partners think that sustainability-oriented change can happen and we can lead it”</p>		
<p>“Our network’s entrepreneurs continuously support the development of skills of their employees and management”</p>		

4 Results

This section proposes the characteristics of SMEs' partners in achieving the SDGs. Tables 3, 4, 5 and 6 present the data structure by providing a graphical representation of the transition from the raw data (first-order concept) to the subdimensions (second-order themes) and then the dimensions (aggregate dimensions) used in the data analysis. Both the dimensions and subdimensions were used as key categories to analyse the interviews (data analysis) and, simultaneously, as variables to classify the results obtained (data interpretation). More precisely, the SME characteristics dimensions that emerged from this study include economic, environment and social dimensions (Elkington 1994; Zhou et al. 2018) and a purpose dimension (Mion and Loza Adauí 2020). Each of these are described by highlighting the connected subdimensions as they emerged via data analysis.

4.1 The characteristics of SMEs' partners: economic dimension

With specific reference to the economic dimension, the case examined for this study highlights the three following subdimensions regarding the characteristics of SMEs' partners: quality utility value, technique level and profitability (see Table 3). More precisely, Wråd has activated partnerships that address quality utility value because partners allow reuse and recycling of raw materials, stimulating and supporting a circular economy process. Wråd described this as follows:

Together with Alisea we have recycled over 16 tons of graphite powder in three years.

Furthermore, this case outlines the importance of collaborating with partners whose technical level is high. With reference to this, Wråd's partners favour a process of development of technological and procedural skills. The case study highlights the application of innovative and sustainable technologies to new fabrics and fabric dyeing processes. The network also includes companies that, despite operating in different sectors, have been able to create interconnections through the applicability of their technological know-how for the purpose of the creation of new fabrics, the digitisation of manufacturing processes in the fashion industry and the development of traceability of the supply chain. Wråd argued as follows:

The partnership with Tecno E.D.M. srl, which has invested in machinery and functional resources, has been invaluable in understanding how to dye with a powder.

We are collaborating with 1TrueID to apply an innovative technology that will allow us to attribute a unique digital DNA to each individual product, giving anyone immediate access, via smartphone, to the information we want to convey about the product.

Finally, the Wråd case reveals profitability as an important characteristic of SMEs' partners. Profitability is essential because it enables the growth of each

partner, by favouring the penetration of new markets and the development of synergistic relationships that are reflected in strategies to enhance the marketing of the respective products, while facilitating consumer understanding of the sustainable value of the products made and the commitment to co-create sustainable value connected to the development of a circular economy. Wråd outlined this as follows:

With our global partners, we were able to reach overseas markets, both in North America and Japan.

We and our partners are aligned on investing in slow capital.

4.2 The characteristics of SMEs' partners: environmental dimension

As regards the environment dimension, the analysis underlines the five following subdimensions of the characteristics of SMEs' partners: resource consumption efficiency, pollution production, energy efficiency, environment management system and environment equipment and facilities (see Table 4). Specifically, Wråd has developed collaborations with partners that aim to reduce their resource consumption and operate efficiently to empower an innovative and circular supply chain. Wråd underlined this as follows:

Our first original product, the Graphi-Tee t-shirt, was born from the Perpetua pencil of our partner Alisea, using recycled graphite powder.

Wråd and its partners are particularly sensitive to the environmental impact generated by the waste of resources—something that is particularly high in the fashion industry. As the Ellen MacArthur Foundation (2017b) revealed, each year millions of tons of clothes are produced, worn and thrown away. Every second, the equivalent of a rubbish truck of clothes is burned or buried in landfill. The fashion industry is one of the major contributors of plastic microfibres entering our oceans. This issue was emphasised by Wråd as follows:

On average people use their clothes for 1–3 Instagram posts and then throw them away. This results in very high environmental damage.

The fashion industry needs to tackle the root causes of global challenges such as climate change, biodiversity loss and pollution. Wråd and its partners agree that fashion needs to reinvent itself, and that this vision will require an integrated commitment between companies in the sector, and between industry, government and intergovernmental organisations, to work together and support significant investment, large-scale innovation, transparency and traceability. These actions are important to improve energy efficiency. As noted by Wråd:

Thanks to the innovative and sustainable technologies created and applied in conjunction with our partners, we have reduced consumption of water and energy in the production processes.

However, the above-mentioned actions are also fundamental to support an environmental management system, which favours the diffusion of holistic standards

covering the processing, manufacturing, packaging, labelling, trading and distribution of all textiles made from certified organic fibres. These fibres have to be produced without the use of synthetic pesticides, herbicides or genetically modified organisms, and hence, protect farmers and biodiversity. A certification system such as Global Organic Textile Standard (GOTS) ensures the responsible and efficient use of resources because it requires minimisation of the use of water, chemicals and energy, a decrease in CO₂ emissions and an increase in renewable energy. As Wråd pointed out:

Our supply partners provide all required certifications and traceability of their production and manufacturing activities. For example, our fabric suppliers use a Global Organic Textile Standard (GOTS)-certified yarn.

Wråd considers compliance with this condition essential to establishing a partnership with another company, as clearly highlighted below:

For every single product, we have certificates to guarantee what we say. Otherwise, we do not activate the collaboration. For example, we blocked a Capsule Collection for this reason: we had developed mint fibre, a beautiful product with a spectacular hand feel, which had also been requested for an exclusive Capsule in Yoox Net-a-Porter, but our supplier was unable to supply us with the mint traceability.

Redesigning the way clothes are made and used requires an environment of equipment and facilities able to support the development of a circular supply chain that enables full traceability, from field to finished product. In this regard, Wråd affirmed its commitment and that of its partners:

In collaboration with our partners, we are integrating blockchain technology to develop traceability within the supply chain.

Together with our partners, we have created a circular supply chain in Italy.

4.3 The characteristics of SMEs' partners: social dimension

With regard to the social dimension, the case analysis highlights the four following subdimensions of the characteristics of SMEs' partners: public health, employee engagement, brand reputation and local communities' influence (see Table 5). Specifically, the protection of public health is a sustainability challenge that Wråd and its partners face responsibly by carefully choosing textiles and investing in the research and development of new materials and production processes that are compliant with organic standards to ensure organic integrity of their products. They are committed to creating an industry that actively lowers its environmental impact and prioritises human health over short-term profit. As stated by Wråd:

Graphite is a mineral that protects against electromagnetic waves and is a conductor of electricity and heat. With our partners, we aim to optimise its properties for the development of fabrics potentially capable of protecting the

human body from exposure to electrosmog, considered one of the main causes of many neurological problems, sleep disorders, anxiety and nervousness, and often also considered due to an increase in the suicide rate.

Thanks to the innovative and sustainable technologies developed and applied with our partners, we are able to guarantee the safety of the skin, with significant human, social and environmental benefits.

Another central aspect for a socially sustainable industry concerns dignity and respect for workers. Wråd and its partner companies are strongly committed to employee engagement, supporting professional and skills development, and stimulating the involvement of collaborators in the design and management of projects. Within Wråd and its partnership network, people work in a cohesive and versatile manner, with a view to improving research and development and innovation processes. Indeed, the company claimed that:

Together with our partners we want to restore value to the human resources employed in the supply chain. The ‘Who Made My Clothes’ campaign by Fashion Revolution, one of the strongest social movements we collaborate with, supports brands that start by saying ‘These people made my clothes.’ This manifesto is part of our DNA.

We support our team members to develop projects from conception to implementation ... aiming at strengthening internal and partnership engagement.

Socially responsible behaviour attracts interest and attention in the competitive world market; it actively contributes to building a good brand reputation. Wråd and its partners have a good reputation, they develop synergic strategies to reinforce their market competitiveness, support their sales, communicate with transparency the sustainable value of their products and their shared commitment to the co-creation of sustainable value and invest in the traceability of the entire supply chain, concretely attesting to their credibility. A key variable in the relationship developed with the market, partners and all relevant stakeholders is trust. When customers believe an organisation is trustworthy and behaves in a socially responsible manner, evaluation and assessment of that company is positively affected. In this regard, Wråd highlighted the following:

Our product is no longer just a t-shirt or a jacket, but an innovative tool to communicate our sustainability-oriented values and increase trust in the brand.

We try to make our supply chain transparent so that it represents an additional guarantee on the commitment of the brands involved in terms of sustainability.

With several institutional partners (national and international), we have shared innovative and effective digital communication projects on the sustainability of fashion, which have provided us with high visibility and have attracted the attention of global companies in the sector (from logistics to fabric development), institutions, the public and consumers.

A further relevant commitment of Wråd and its partners is projected towards the promotion of sustainable development of local communities through communication projects that contribute to increasing awareness of the need to adopt responsible behaviours and, in this vein, stimulate active participation of local actors. Among these, Wråd underlined educational projects on sustainability developed in collaboration with educational institutions such as schools and universities, promoted to high school and university students in order to spread understanding of the importance of adopting a sustainable lifestyle and encourage greater social proactivity:

On Instagram, we have tried to communicate the real impact of the fashion industry through images. First of all, a digital community has been created, small but with a high engagement rate, from 10% to 20% on our posts, well above the average in the fashion industry.

With partners such as Fashion Revolution or Eco-Age, we have created an educational project on sustainability for schools.

4.4 The characteristics of SMEs' partners: purpose dimension

With specific reference to the purpose dimension, the case analysed for this study indicated the following subdimensions of the characteristics of SMEs' partners: sustainability-oriented awareness development, sustainable orientation, sustainable collective culture, proactive managerial skills, organisational learning and proactive and innovative leadership (see Table 6).

Within the partnership network generated and supported by Wråd, and by the numerous actors with which the company has established and consolidated important relationships, organisations share and adopt a communicative approach aimed at the development of sustainability-oriented awareness. Specifically, they aim to create awareness of the negative impacts produced by the fashion industry and the need to promote educational paths regarding sustainable development. This awareness has become the core of the message conveyed through the products:

We were born as an Instagram page to generate awareness about the real cost of the fashion industry on an environmental and social level. Our partners share this communication approach with us, which is now widespread throughout the network.

The product offered to the market is not merely a t-shirt, another pair of jeans or another sweatshirt that nobody needs, but a form of personal investment to move towards an educational path for sustainable development.

We don't sell t-shirts and jackets; we sell sustainability awareness through our products.

Wråd has established partnerships with organisations that have a profound sustainability orientation, on which their mission and strategic orientation are strongly focused. They activate collaborative projects strictly aimed at finding

innovative and sustainable solutions and respecting the scarcity of resources and the value of all humans. Furthermore, they attribute to their respective products a purpose connected to a more sustainable vision of the future and continuously monitor weak signals to intercept any form of change and need in society and in the environment. Among the various citable initiatives, Wråd reported the following:

In 2017, together with our partner Yoox, we created a communication campaign and an exclusive Capsule Collection called WRÅDoscope, spread all over the world. We communicated sustainability to a very specific audience and attributed a function, a purpose to the product. For each zodiac sign, we created a functional communication for a more sustainable lifestyle. The horoscope communicated how to potentially reduce your environmental impact and be a better person next year.

Wråd also underlined that:

Social sustainability is pivotal in our company's and partners' strategy, which consists of a set of core values to spread and promote a culture of sustainable innovation.

In line with the elements highlighted so far, the study shows that the development of a sustainable collective culture is an important goal for Wråd and its partners. They support the need for a shared vision between companies, institutions, employees, consumers and local communities to achieve positive change and support an effective process of rethinking production and consumption in the fashion industry to solve complex problems in terms of economic, environmental and social sustainability. In this regard, Wråd stated:

One purpose of our network of partners is to potentially develop technologies that other companies can use in the future.

We and our partners worked to make our supply chain transparent in every area.

The efficient management of the multiple and complex activities characterising a sustainable value chain within the fashion supply chain requires highly proactive managerial skills. Wråd's and partners' management have developed a series of dynamic capabilities and organisational skills that enable them to acquire, combine and transform tangible and intangible resources in many ways. This, along with the interfunctional integration of competences, allows them to continuously address changing environmental conditions, strengthen competitive capacity, improve performance and offer sustainable value. As Wråd underlined:

Creativity and non-linear thinking are developed through the relationships we have established with highly qualified art directors, fashion designers, fashion photographers and sustainability managers.

Wråd also uses strategies for value co-creation with partners to develop organisational learning focused on the active exchange of knowledge and incentive logic for

ongoing learning, and on the management of information processes and transparent communication through the synergic and efficient use of new technologies that help to increase engagement. As the company pointed out:

By working closely with our partners, we have learned that it is necessary that communication excites and inspires, and is deeply interesting.

Each partner is constantly involved in the activities of the company by adopting a leadership style that is versatile, adaptive and proactive in terms of agile strategies in pursuing the SDGs. As Wråd stated:

In our network, entrepreneurs focus on sharing strategies and knowledge, are open to discussion and dialogue, are innovation-oriented and seek to encourage internal and external connections and cohesion. They practice a visionary leadership style to develop the skills of others.

5 Discussion

The analysis of Wråd's activities and processes, designed and launched in collaboration with various partners, shows that the companies involved pursue the objective of sustainability via every innovative practice and initiative. Their contribution to the generation of sustainable value is outlined in terms of economic, environmental, social and purpose dimensions. Thus, the three sustainability dimensions (economic, environmental and social) found in previous studies are confirmed (Elkington 1994; Zhou et al. 2018), while a new dimension (purpose), which has emerged in recent academic thinking, has been added (Mion and Loza Adauí 2020).

In terms of the *economic dimension*, our analysis shows that SMEs' partners engaged in the creation of sustainable value pay attention to the development of *quality utility value*, promoting the reuse and recycling of materials and products that have reached the end of their life cycle; *technique level*, investing in the improvement of technical and procedural skills; and *profitability*, generated through a well-planned recycling program that saves an enormous amount of energy as well as natural resources.

With reference to the *environmental dimension*, the analysis highlights the strong commitment of Wråd and its partners towards reducing resource wastage and promoting their efficient management. In this regard, they believe it is essential to support substantial investment for the purpose of developing sustainable innovation, transparency of manufacturing processes and traceability of the supply chain. Specifically, their vision is projected towards the improvement of *resource consumption efficiency*, with regard to the optimisation of the consumption of raw materials, materials and products. It is also projected towards the reduction of *pollution production*, considering the urgency of sustainable practices in light of the serious environmental problems produced by the fashion industry, as a result of over-production, over-consumption and problematic end-of-life solutions. Further important elements perceived as sustainability needs towards which Wråd and its partners strive include *energy efficiency* in the use of energy, water, gas, fuel and other energy sources;

environmental management systems, through the dissemination of environmental certifications; and *environmental equipment and facilities*, for the purpose of efficient environmental management of resources.

These findings are in line with previous studies (Zhou et al. 2018), although it should be noted that, in this study, labour resources and related tangible and intangible resources were not included in the resource consumption efficiency characteristic of SMEs' partners, but rather, assimilated in other characteristics relating to the social and purpose dimensions.

In the context of the *social dimension*, Wråd's responsible action in collaboration with its partners is focused on enhancing *public health*, demonstrated by the care with which they choose materials and seek innovative solutions that ensure the organic integrity of the products. Furthermore, their responsible action does not neglect *employee engagement* in all business processes, treating employees with respect and dignity, developing skills, stimulating their involvement and promoting cohesion and versatility. A further characteristic sought in the selection of partners is the management of *brand reputation*, through transparent communication and actions that strengthen the trust in and credibility of the company, including investment in full traceability from raw materials to the stages of processing, spinning, weaving and knitting, wet-processing, manufacturing, packaging, labelling and trading. Finally, in our analysis, *local communities' influence* stands out among the characteristics of the social dimension sought by Wråd in its partners, certifying a commitment to conceive and promote communication and educational projects capable of building understanding of the importance of responsible conduct and stimulating its adoption. Many theories and much evidence suggests that education on the underlying ideas and promotion of sustainability will contribute to cultural change (Zheng et al. 2021).

With reference to the social dimension, our analysis underlines the inclusion of a new subdimension in the literature represented by public health and the redefinition of the subdimension 'employee turnover rate' proposed by Zhou et al. (2018) to 'employee engagement', since this factor not only pertains to the concepts of employee churn or turnover rate, but can also be affected by working conditions and wage levels. It aims to include the company's commitment to the ethical treatment of employees, care for their professional growth and their involvement in decision-making processes.

With reference to the *purpose dimension*, this study indicates the following set of characteristics of SMEs' partners. First is the characteristic of *sustainable-oriented awareness development*, which is necessary for lifestyle change that supports sustainable development. Another is *sustainable orientation*, a strategic resource that can lead to competitive advantage and superior (financial) performance and that positively influences new product development (Claudy et al. 2016). Also important is a *sustainable collective culture*, which seeks to spread in a cohesive way, inside and outside the company, values based on sustainability, and, moreover, promotes and enhances a sense of responsible citizenship on the part of numerous social actors and a sense of belonging towards communities and territories. Two further relevant characteristics relating to the purpose dimension are represented by *proactive managerial skills*, aimed at stimulating the creation and dissemination of knowledge and

new value, and *organisational learning*, aimed at the acquisition and exchange of knowledge and skills that support decision-making in the design and management of sustainable practices. The complexity and dynamism of the design and management of business processes from a sustainability perspective requires a number of factors, including continuous training programs, integration between the various functional areas of the company and sustainable communication platforms based on digitalisation, harmonised relationships and stakeholder engagement. Finally, also emerging from the study is the characteristic of *proactive and innovative leadership*, able to harmonise strategies and business tactics, a sustainable culture and the continuous collection of feedback from stakeholders to share and intercept new needs. A leadership team committed to regenerating new sustainable values supports the objective of sustainable innovation, improved human wellbeing and long-term social, economic and environmental benefits. Compared with previous studies, the dimension of purpose that emerged from this research constitutes a novel contribution to the literature; one that may be added to those of the TBL theory.

The harmonisation of the analysed characteristics is the basis of the strategic orientation that guides Wråd and its partners to develop collaborative projects with the aim to identify and respond to community needs, to predict those needs and to enrich community members' lives by supporting them towards a more sustainable lifestyle. The company and its partners are united by the desire to explore contexts outside their respective comfort zones, allowing themselves to be stimulated by the world and its priorities, and acknowledging the urgencies related to the future. They focus on the environment, while creativity and innovation act as a source of inspiration through a common vision of shared values.

5.1 Theoretical implications

From a theoretical point of view, this study confirms the centrality of SMEs in the pursuit of the SDGs (Crick and Crick 2021; Oppong 2022; Smith et al. 2022) and, above all, the importance of the establishment of partnerships between SMEs to achieve such (Joseph and Kulkarni 2020; Prashantham and Birkinshaw 2020; Jiménez et al. 2021; Russo and Schena 2021; Ordonez-Ponce et al. 2021). The adoption of forms of partnerships with more stakeholders allows an accumulation of know-how and skills capable of overcoming the constraints deriving from the small size of the individual SME (Journeault 2021; Ordonez-Ponce and Clark 2020).

Furthermore, unlike many past studies on selection criteria (Weber et al. 1991; Ho et al. 2010; Kuo et al. 2010; Hsu et al. 2013; Feng et al. 2017; Kannan 2018; Tseng et al. 2018; Jenssen and de Boer 2019), this study investigated the main characteristics of SMEs sought in identifying an adequate partner with whom to collaborate to achieve the SDGs. In this sense, it represents the first study aimed at contributing to filling the identified research gap.

In line with previous studies that underline the importance of expanding the TBL dimensions (Larner et al. 2017; Raiborn et al. 2013; Arukala and Pancharathi 2020; Hamidi and Worthington 2021), the empirical evidence of this study suggests a further extension of this theory with the added dimension of 'purpose'. Defining

the purpose of a company is an important issue, as evidenced by the ever-growing interest of management researchers (Mion and Loza Adauí 2020). The most recent developments on the subject embrace a comprehensive understanding of the organisational purpose and of the benefit business organisations can create for society (Loza Adauí and Mion 2016; Pies et al. 2018). The relevance of this topic is further reinforced by the existence of firms that explicitly adopt a mission that combines economic, social and environmental goals (Quinn and Thakor 2018; Muñoz et al. 2018); in other words, firms that pursue sustainability goals.

5.2 Practical implications

From a practical point of view, this study highlights that an SME can contribute to the achievement of the SDGs by adopting a pluralistic approach (Glasbergen 2007) that engages multiple partners. To move in this direction, the case analysed highlighted the importance of developing a vision supported by a systemic awareness of the problems that need to be addressed and that transcend the operating sector; in this case, fashion.

With reference to the economic and environmental dimensions, some conditions are becoming increasingly essential for the sustainable development of economies, communities and territories; conditions that the fashion industry cannot ignore if it intends to maintain and develop its competitiveness in the long term. As emerged in the findings of this study, these include the production of certified organic raw materials, the use of recycled raw materials and materials, the strengthening of investments in research and development on recycling processes, and the commitment to creating an ethical supply chain, in which all phases of the value chain are traceable. Therefore, these results suggest investing in products and processes engineering capable of creating real positive value and responding to the real needs of humanity. In this sense, this case study highlights the importance of realising multifunctional products aimed to respond to and face, always via a multistakeholder approach, the challenges and objectives presented by the United Nations via the SDGs (Deias 2021).

As regards the social dimension, this research points out that the ability to develop symbiotic relationships and collaborations is key to creating real functional ecosystems and generating paradigm shifts. The partnership network makes it possible to amplify communication, stimuli and opportunities for the conception and implementation of projects in support of sustainable development objectives towards companies, communities and consumers in a more integrated way. The analysis of the case study suggests SMEs and their partners disseminate, in a more incisive way, information on the materials used and their impact, because consumer do not immediately understand that what they wear can have a negative effect on their health, directly through the skin and/or indirectly through the environmental damage generated by textile production. A further suggestion concerns the reinforcement of the investment in education: the information asymmetry that characterises the fashion system today is the main cause of its environmental and social inefficiency. In this regard, this study recommends brands reinvent their communication strategies and work to become an important guide on topics that transcend their product. They

should propose honest, inclusive and participatory communication, based on respect for the customer, to stimulate behavioural changes defined by a renewed awareness such as more responsible consumption, but also the proposal of innovative, smart and responsible projects and processes, capable of responding to the renewed needs of humanity. In this way, companies could support the development of a collective culture dedicated to sustainability.

Just as important as the field of educational investment is that of innovation, to catalyse the development of circular models capable of reducing textile waste and extending the life of clothing. As emerged in this study, it is important for companies to create products capable of combining ethics and aesthetics, and to convey this commitment effectively. Traceability, transparency and circularity are fundamental, but so is designing ‘pleasing’ products, to activate virtuous exchanges. In this context, new fashion system designers would be necessary and important.

With reference to the purpose dimension, a further recommendation for companies, deriving from the analysis carried out, concerns investment in the training of specialist sustainability skills, and therefore, in the training of specialist sustainability managers, since the dimensions of sustainable value and sustainable innovation are increasingly complex to manage from an integrated perspective. Sustainability specialists should express multidisciplinary skills and should represent generators of continuous interconnection between the actors and the widespread knowledge in the sustainable value chain to promote the search for sustainable solutions across all business sectors. Moreover, the results highlight for SMEs and their partners the importance of enhancing their ability to communicate in the digital environment and to convey their messages in an emotionally engaging and rapid manner, with an immediate and memorable impact through a variety of initiatives: the effective planning of communication campaigns, participation in various events such as seminars, congresses, workshops, tradeshows, TED Talks, competitions and others, which can be configured or may include specific spaces such as sustainability hubs. Digital communication channels allow the company to relate to consumers, partners and other stakeholders, whose perceptions, ideas, proposals and visions offer the opportunity for cultural contamination and debate and the drive to spread a culture of sustainability and, therefore, the growth of social awareness.

This approach to continuous improvement, and the incessant propensity to accept new challenges in which SMEs perceive stimuli and opportunities, imply a need to redefine the conditions of efficient and effective management of research and development, supply chain processes and communication projects, in symbiosis with the purpose of partners.

6 Conclusion

This study fills a gap in the literature related to the characteristics of SMEs’ partners that can better contribute to the achievement of the SDGs. Indeed, while previous research had analysed the evaluation criteria via which to select specific supply chain partners, no previous studies have examined the characteristics of SMEs’ partners, such as businesses, public government, educational institutions and non-profit

organisations, that support SMEs in a more effective pursuit of sustainable development. The Wråd case study confirmed that SMEs can contribute to the achievement of the SDGs by developing partnerships with multiple stakeholders. This research contributed to enriching knowledge on the topic by revealing that the characteristics of SMEs' partners can be classed into the four following dimensions: economic, environmental, social and purpose. Furthermore, the results of the study enrich the literature by identifying the subdimensions of the above-mentioned dimensions. Specifically, the analysis proposed that quality utility value, technique level and profitability are the subdimensions of the economic dimension; resource consumption efficiency, pollution production, energy efficiency, environment management system and environment equipment and facilities are the subdimensions of the environmental dimension; public health, employee engagement, brand reputation and local communities' influence are the subdimensions of the social dimension; and sustainability-oriented awareness development, sustainable orientation, sustainable collective culture, proactive managerial skills, organisational learning and proactive and innovative leadership are the subdimensions of the purpose dimension.

The results of this study also highlighted that, beyond the choice to invest in compliance with ethical criteria, the commitment of the SME and its partners is projected towards the engineering of products and processes that are able to create positive value and respond to the real needs of humanity. Products and processes thus become multifunctional tools designed and created with a multiple stakeholder approach and vision to address the challenges of the United Nations SDGs. From this perspective, each project conceived is the result of synergic work with partners.

The study as a whole offers interesting points for reflection; however, it also suffers limitations. First, the paper proposes the analysis of a single case study operating in the fashion industry; it is therefore not possible to generalise the results obtained. To this end, a larger sample of SMEs operating in different businesses and representing, particularly, companies capable of combining innovation and sustainability in the process of generating and disseminating value and contributing to SDGs, should be analysed. This new research direction would be of interest because developing the analysis with reference to other companies operating in other sectors could allow us to highlight other types of relevant partners and/or other relevant characteristics in addition to those highlighted by this study for the purpose of achieving the SDGs.

Second, the analysis was conducted by adopting the company's perspective to understand the characteristics of the partners with whom it aims to develop long-term synergistic relationships and design strategies that favour efficient and effective management of value co-creation processes and the outcomes obtained in terms of sustainable innovation. A future research direction could therefore explore the point of view of the partners, on the basis of which the company consciously modulates its strategy, culture, leadership and resource selection processes in the business arena, and the development and consolidation of partnerships. In this respect, it would also be important to assess how the perceptions of one partner can not only facilitate but also hinder the co-creation of sustainable value.

A further in-depth exploration could be directed towards the analysis of partner engagement practices, tools and platforms and the exploration of consumer engagement strategies to contribute to the achievement of the SDGs and to understand

mechanisms through which sustainable innovation is generated. The analysis of choices and actions could be conducted using qualitative and quantitative techniques including in-depth interview, focus group, survey and social network analysis.

Funding Open access funding provided by Università degli Studi di Verona within the CRUI-CARE Agreement.

Declarations

Conflict of interest This study does not have any competing interests to declare and it was not funded.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Abdelmeguid A, Afy-Shararah M, Salonitis K (2022) Investigating the challenges of applying the principles of the circular economy in the fashion industry: a systematic review. *Sustain Prod Consum* 32:505–518. <https://doi.org/10.1016/j.spc.2022.05.009>
- Agrawal R, Wankhede VA, Kumar A, Luthra S (2021) Analysing the roadblocks of circular economy adoption in the automobile sector: reducing waste and environmental perspectives. *Bus Strategy Environ* 30(2):1051–1066. <https://doi.org/10.1002/bse.2669>
- Agrawal R, Majumdar A, Majumdar K, Raut RD, Narkhede BE (2022) Attaining sustainable development goals (SDGs) through supply chain practices and business strategies: a systematic review with bibliometric and network analyses. *Bus Strategy Environ* 31(1):1–19. <https://doi.org/10.1002/bse.3057>
- Altaf A (2019) MSMEs: its role in sustainable development in India. *J Gujarat Res Soc* 21(5):387–395
- Álvarez Jaramillo J, Zartha Sossa JW, Orozco Mendoza GL (2019) Barriers to sustainability for small and medium enterprises in the framework of sustainable development—literature review. *Bus Strategy Environ* 28(4):512–524. <https://doi.org/10.1002/bse.2261>
- Arrigo E (2015) Corporate sustainability in fashion and luxury companies. *Symph Emerg Issues Manag* 4(4):9–23. <https://doi.org/10.4468/2015.4.02arrigo>
- Arukala SR, Pancharathi RK (2020) Integration of advances in sustainable technologies for the development of the Sustainable Building Assessment Tool. *Int J Technol Manag Sustain Dev* 19(3):335–360. https://doi.org/10.1386/tmsd_00030_1
- Åström J, Reim W, Parida V (2022) Value creation and value capture for AI business model innovation: a three-phase process framework. *Rev Manag Sci* 16:2111–2133. <https://doi.org/10.1007/s11846-022-00521-z>
- Atstja D, Cudečka-Puriņa N, Vesere R, Abele L, Spivakovskyy S (2021) Challenges of textile industry in the framework of Circular Economy: case from Latvia. In: *Int Conf. Sustain Circ Manag Env Eng (ISCMEE 2021)*. <https://doi.org/10.1051/e3sconf/202125501014>. https://www.e3s-conferences.org/articles/e3sconf/pdf/2021/31/e3sconf_iscmee2021_01014.pdf. Accessed 15 Feb 2023
- Awasthi A, Govindan K, Gold S (2018) Multi-tier sustainable global supplier selection using a fuzzy AHP-VIKOR based approach. *Int J Prod Econ* 195:106–117. <https://doi.org/10.1016/j.ijpe.2017.10.013>

- Bebbington J, Unerman J (2018) Achieving the United Nations Sustainable Development Goals: an enabling role for accounting research. *Account Audit Account J* 31(1):2–24. <https://doi.org/10.1108/AAAJ-05-2017-2929>
- Berrone P, Ricart JE, Duch AI, Bernardo V, Salvador J, Piedra Peña J, Rodríguez Planas M (2019) EASIER: an evaluation model for public-private partnerships contributing to the sustainable development goals. *Sustainability (switz)* 11(8):2339–2364. <https://doi.org/10.3390/su11082339>
- Beverland M, Lindgreen A (2010) What makes a good case study? A positivist review of qualitative case research published in industrial marketing management, 1971–2006. *Ind Mark Manag* 39(1):56–63. <https://doi.org/10.1016/j.indmarman.2008.09.005>
- Bocken NMP, Short SW (2021) Unsustainable business models—recognising and resolving institutionalised social and environmental harm. *J Clean Prod* 312:127828. <https://doi.org/10.1016/j.jclepro.2021.127828>
- Bonfanti A, Mion G, Brunetti F, Vargas-Sánchez A (2022) The contribution of manufacturing companies to the achievement of sustainable development goals: an empirical analysis of the operationalization of sustainable business models. *Bus Strategy Environ*. <https://doi.org/10.1002/bse.3260>
- Burritt RL, Christ KL, Rammal HG, Scaltegger S (2018) Multinational enterprise strategies for addressing sustainability: the need for consolidation. *J Bus Eth* 164(2):389–410. <https://doi.org/10.1007/s10551-018-4066-0>
- Cantele S, Zardini A (2020) What drives small and medium enterprises towards sustainability? Role of interactions between pressures, barriers, and benefits. *Corp Soc Responsib Environ Manag* 27(1):126–136. <https://doi.org/10.1002/csr.1778>
- Chandak T (2014) Sustainable fashion: from Niche to Necessity. *FG Mag*. <https://thefashionlobe.com/sustainable-fashion>. Accessed 15 Feb 2023
- Chege SM, Wang D (2020) The influence of technology innovation on SME performance through environmental sustainability practices in Kenya. *Technol Soc* 60(1):101210. <https://doi.org/10.1016/j.techsoc.2019.101210>
- Chopra M, Singh SK, Gupta A, Agarwal K, Gupta BB, Colace F (2022) Analysis & prognosis of sustainable development goals using big data-based approach during COVID-19 pandemic. *Sustain Technol Entrep* 1(2):100012. <https://doi.org/10.1016/j.stae.2022.100012>
- Clarke A, Fuller M (2010) Collaborative strategic management: strategy formulation and implementation by multi-organizational cross-sector social partnerships. *J Bus Eth* 94(1):85–101. <https://doi.org/10.1007/s10551-011-0781-5>
- Claudy MC, Peterson M, Pagell M (2016) The roles of sustainability orientation and market knowledge competence in new product development success. *J Prod Innov Manag* 33(S1):72–85. <https://doi.org/10.1111/jpim.12343>
- Creswell JW (2014) *Research design: qualitative, quantitative, and mixed methods approaches*. Sage, London
- Crick JM, Crick D (2021) Coopetition and family-owned wine producers. *J Bus Res* 135(C):319–336. <https://doi.org/10.1016/j.jbusres.2021.06.046>
- D'Amato D, Veijonahoa S, Toppinen A (2020) Towards sustainability? Forest-based circular bioeconomy business models in Finnish SMEs. *For Policy Econ* 110:1–13. <https://doi.org/10.1016/j.forpol.2018.12.004>
- Dana LP, Salamzadeh A, Hadizadeh M, Heydari G, Shamsoddin S (2022) Urban entrepreneurship and sustainable businesses in smart cities: exploring the role of digital technologies. *Sustain Technol Entrep* 1:100016. <https://doi.org/10.1016/j.stae.2022.100016>
- de Sousa L, Jabbour AB, Ndubisi NO, Roman Pais Seles BM (2020) Sustainable development in Asian manufacturing SMEs: progress and directions. *Int J Prod Econ* 225:1–14. <https://doi.org/10.1016/j.ijpe.2019.107567>
- de Villiers C, Kuruppu S, Dissanayake D (2021) A (new) role for business—promoting the United Nations' Sustainable Development Goals through the internet-of-things and blockchain technology. *J Bus Res* 131:598–609. <https://doi.org/10.1016/j.jbusres.2020.11.066>
- Deias L (2021) Quando la moda diventa esempio di eccellenza e sostenibilità, 18th February. <https://journal.cittadellarte.it/arte-societa/la-moda-diventa-esempio-eccellenza-sostenibilita-intervista-alco-fondatore-wrad-matteo-ward>. Accessed 15 Feb 2023
- Di Vaio A, Palladino R, Hassan R, Escobar O (2020) Artificial intelligence and business models in the sustainable development goals perspective: a systematic literature review. *J Bus Res* 121:283–314. <https://doi.org/10.1016/j.jbusres.2020.08.019>

- Dickson GW (1966) An analysis of vendor selection systems and decisions. *J Purch* 2(1):5–17. <https://doi.org/10.1111/j.1745-493X.1966.tb00818.x>
- Dubois A, Gadde LE (2014) Systematic combining: a decade later. *J Bus Res* 67(6):1277–1284. <https://doi.org/10.1016/j.jbusres.2013.03.036>
- Eisenhardt KM (1989) Building theories from case study research. *Acad Manag Rev* 14(4):532–550. <https://doi.org/10.2307/258557>
- ElAlfy A, Palaschuk N, El-Bassoumy D, Wilson J, Weber O (2020) Scoping the evolution of corporate social responsibility (CSR) research in the Sustainable Development Goals (SDGs) era. *Sustainability* 12(14):5544. <https://doi.org/10.3390/su12145544>
- Elkington J (1994) Towards the sustainable corporation: win-win-win business strategies for sustainable development. *Calif Manag Rev* 36(2):90–100. <https://doi.org/10.2307/41165746>
- Ellen MacArthur Foundation (2017a) A new textiles economy: redesigning fashion's future. <http://www.ellenmacarthurfoundation.org/publications>. Accessed 15 Feb 2023
- Ellen MacArthur Foundation (2017b) Fashion and the circular economy. <https://ellenmacarthurfoundation.org/fashion-and-the-circular-economy-deep-dive>. Accessed 15 Feb 2023
- European Commission (2022) Annual report on European SMEs 2021/22. https://ec.europa.eu/growth/smes/business-friendly-environment/performance-review_en?pk_source=ec_newsroom&pk_medium=link&pk_campaign=spr17#annual-report. Accessed 15 Feb 2023
- Fellnhöfer K, Kraus S, Bouncken RB (2014) The current state of research on sustainable entrepreneurship. *Int J Bus Res* 14(3):163–172. <https://doi.org/10.18374/IJBR-14-3.11>
- Feng Y, Zhu Q, Lai KH (2017) Corporate social responsibility for supply chain management: a literature review and bibliometric analysis. *J Clean Prod* 158(C):296–307. <https://doi.org/10.1016/j.jclepro.2017.05.018>
- Fernández Fernández Y, Fernández López M, Blanco BO (2018) Innovation for sustainability: the impact of RandD spending on CO₂ emissions. *J Clean Prod* 170:3459–3467. <https://doi.org/10.1016/j.jclepro.2017.11.001>
- Fletcher K (2007) Slow fashion. *Ecologist*. <https://theecologist.org/2007/jun/01/slow-fashion>. Accessed 15 Feb 2023
- Gabriel M, Luque MLD (2020) Sustainable development goal 12 and its relationship with the textile industry. In: Gardetti MA, Muthu SS (eds) *The UN Sustainable Development Goals for the textile and fashion industry*. Springer, Singapore, pp 21–46
- Geissdoerfer M, Savaget P, Bocken NM, Hultink EJ (2017) The circular economy—a new sustainability paradigm? *J Clean Prod* 143(6):757–768. <https://doi.org/10.1016/j.jclepro.2016.12.048>
- Geissdoerfer M, Vladimirova D, Evans S (2018) Sustainable business model innovation: a review. *J Clean Prod* 198:401–416. <https://doi.org/10.1016/j.jclepro.2018.06.240>
- Gioia DA, Corley KG, Hamilton AL (2013) Seeking qualitative rigor in inductive research: notes on the Gioia methodology. *Organ Res Methods* 16(1):15–31. <https://doi.org/10.1177/1094428112452151>
- Glasbergen P (2007) Setting the scene: the partnership paradigm in the making. In: Glasbergen P, Biermann F, Mol APJ (eds) *Partnerships, governance and sustainable development: reflections on theory and practice*. Edward Elgar, Cheltenham, pp 1–25
- Govindan K, Shankar KM, Kannan D (2020) Achieving sustainable development goals through identifying and analyzing barriers to industrial sharing economy: a framework development. *Int J Prod Econ* 227(4):1–13. <https://doi.org/10.1016/j.ijpe.2019.107575>
- Halinen A, Medlin CJ, Törnroos JÄ (2012) Time and process in business network research. *Ind Mark Manag* 41(2):215–223. <https://doi.org/10.1016/j.indmarman.2012.01.006>
- Halinen A, Törnroos JÄ, Elo M (2013) Network process analysis: an event-based approach to study business network dynamics. *Ind Mark Manag* 42(8):1213–1222. <https://doi.org/10.1016/j.indmarman.2013.05.001>
- Hamidi ML, Worthington AC (2021) Islamic banking sustainability: theory and evidence using a novel quadruple bottom line framework. *Int J Bank Mark* 39(5):751–767. <https://doi.org/10.1108/IJBM-06-2020-0345>
- Hemantha Y (2021) Fashion industry and sustainability: a circular economy approach. *IUP J Supply Chain Manag* 18(4):33–51
- Ho W, Xu X, Dey PK (2010) Multi-criteria decision making approaches for supplier evaluation and selection: a literature review. *Eur J Oper Res* 202(1):16–24. <https://doi.org/10.1016/j.ejor.2009.05.009>
- Horne J, Recker M, Michelfelder I, Jay J, Kratzer J (2020) Exploring entrepreneurship related to the sustainable development goals—mapping new venture activities with semi-automated content analysis. *J Clean Prod* 242(5):118052. <https://doi.org/10.1016/j.jclepro.2019.118052>

- Hsu CW, Kuo TC, Chen SH, Hu AH (2013) Using DEMATEL to develop a carbon management model of supplier selection in green supply chain management. *J Clean Prod* 56:164–172. <https://doi.org/10.1016/j.jclepro.2011.09.012>
- Jahanshahi AA, Al-Gamrh B, Gharleghi B (2020) Sustainable development in Iran post-sanction: embracing green innovation by small and medium-sized enterprises. *Sustain Dev* 28(4):781–790. <https://doi.org/10.1002/sd.2028>
- Jenssen MM, de Boer L (2019) Implementing life cycle assessment in green supplier selection: a systematic review and conceptual model. *J Clean Prod* 229:1198–1210. <https://doi.org/10.1016/j.jclepro.2019.04.335>
- Jiménez E, de la Cuesta-González M, Boronat-Navarro M (2021) How small and medium-sized enterprises can uptake the sustainable development goals through a cluster management organization: a case study. *Sustainability* 13(5939):1–18. <https://doi.org/10.3390/su13115939>
- Joseph S, Kulkarni AV (2020) Creating sustainable contribution to the environment: case studies from MSMEs in Pune. *Int J Soc Ecol Sustain Dev* 11(4):1–14. <https://doi.org/10.4018/IJSESD.2020100101>
- Journeault M, Perron A, Vallières L (2021) The collaborative roles of stakeholders in supporting the adoption of sustainability in SMEs. *J Environ Manag* 287:1–12. <https://doi.org/10.1016/j.jenvman.2021.112349>
- Kannan D (2018) Role of multiple stakeholders and the critical success factor theory for the sustainable supplier selection process. *Int J Prod Econ* 195:391–418. <https://doi.org/10.1016/j.ijpe.2017.02.020>
- Ketokivi M, Choi T (2014) Renaissance of case research as a scientific method. *J Oper Manag* 32(5):232–240. <https://doi.org/10.1016/j.jom.2014.03.004>
- Khanin D, Rosenfield R, Mahto RV, Singhal C (2022) Barriers to entrepreneurship: opportunity recognition vs. opportunity pursuit. *Rev Manag Sci* 16(4):1147–1167. <https://doi.org/10.1007/s11846-021-00477-6>
- Kolk A, Kourula A, Pisani N (2017) Multinational enterprises and the sustainable development goals: what do we know and how to proceed? *Transnatl Corp* 24(3):9–32. <https://doi.org/10.1835/6f5fab5e-en>
- Kristoffersen E, Blomsma F, Mikalef P, Li J (2020) The smart circular economy: a digital-enabled circular strategies framework for manufacturing companies. *J Bus Res* 120:241–261. <https://doi.org/10.1016/j.jbusres.2020.07.044>
- Kuo RJ, Wang YC, Tien FC (2010) Integration of artificial neural network and MADA methods for green supplier selection. *J Clean Prod* 18(12):1161–1170. <https://doi.org/10.1016/j.jclepro.2010.03.020>
- Larner J, Cheverst K, MacDonald M, Hoile C, Soutar A (2017) The open source guild: creating more sustainable enterprise? *J Manag Dev* 36(1):71–80. <https://doi.org/10.1108/JMD-10-2014-0134>
- Lewittes E (2019) How fashion brands can create a more sustainable end-to-end retail economy. *Fashionista*. <https://fashionista.com/2019/02/sustainable-fashion-brands-end-to-end-retail-economy>. Accessed 15 Feb 2023
- Loza Aduai CR, Mion G (2016) Catholic social teaching, organizational purpose, and the for-profit/non-profit dichotomy: exploring the Metaprofit proposition. *J Markets Moral* 19(2):275–295
- McCracken G (1988) *The long interview*. Sage, Newbury Park
- Miles MB, Huberman AM (1994) *Qualitative data analysis: an expanded sourcebook*. Sage, Thousand Oaks
- Mintel (2009) *Ethical clothing*. Mintel International Group Limited, London
- Mío C, Panfilo S, Blundo B (2020) Sustainable development goals and the strategic role of business: a systematic literature review. *Bus Strategy Environ* 29(8):3220–3245. <https://doi.org/10.1002/bse.2568>
- Mion G, Loza Aduai C (2020) Understanding the purpose of benefit corporations: an empirical study on the Italian case. *Int J Corp Soc Responsib* 5(4):1–15. <https://doi.org/10.1186/s40991-020-00050-6>
- Montalto A. (2019) A purpose Wrad: circolare e innovativa. <https://economicircolare.com/a-purposwrad-circolare-e-innovativo/>. Accessed 15 Feb 2023
- Muñoz P, Cacciotti G, Cohen B (2018) The double-edged sword of purpose-driven behavior in sustainable venturing. *J Bus Ventur* 33(2):149–178. <https://doi.org/10.1016/j.jbusvent.2017.12.005>
- Nguyen TD, Ngo TQ (2022) The role of technological advancement, supply chain, environmental, social, and governance responsibilities on the sustainable development goals of SMEs in Vietnam. *Econ Res Ekon Istraz* 35(1):4557–4579. <https://doi.org/10.1080/1331677X.2021.2015611>
- Oppong NB (2022) Sustainable development goals and small and medium enterprises: a comparative study of emerging economies and sub-Saharan Africa. *Glob Bus Rev*. <https://doi.org/10.1177/09721509221087848>

- Ordóñez-Ponce E, Clarke A (2020) Sustainability cross-sector partnerships: the strategic role of organizational structures. *Corp Soc Responsib Environ Manag* 27(5):2122–2134. <https://doi.org/10.1002/csr.1952>
- Ordóñez-Ponce E, Talbot D (2022) Multinational enterprises' sustainability practices and focus on developing countries: contributions and unexpected results of SDG implementation. *J Int Dev*. <https://doi.org/10.1002/jid.3682>
- Ordóñez-Ponce E, Weber O (2022) Multinational financial corporations and the sustainable development goals in developing countries. *J Environ Plan Manag* 65(6):975–1000. <https://doi.org/10.1080/09640568.2022.2030684>
- Ordóñez-Ponce E, Clarke A, MacDonald A (2021) Business contributions to the sustainable development goals through community sustainability partnerships. *Sustain Account Manag Policy J* 12(6):1239–1267. <https://doi.org/10.1108/SAMPJ-03-2020-0068>
- Patwa N, Sivarajah U, Seetharaman A, Sarkar S, Maiti K, Hingorani K (2021) Towards a circular economy: an emerging economies context. *J Bus Res* 122:725–735. <https://doi.org/10.1016/j.jbusres.2020.05.015>
- Pies I, Schreck P, Homann K (2018) Reconciling single-objective and multiobjective theories of the firm: a constitutional perspective. *Acad Manag Proc*. <https://doi.org/10.5465/AMBPP.2018.15016abstract>
- Pizzi S, Rosati F, Venturelli A (2021) The determinants of business contribution to the 2030 Agenda: introducing the SDG Reporting Score. *Bus Strategy Environ* 30(1):404–421. <https://doi.org/10.1002/bse.2628>
- Porter ME, Kramer MR (2011) Creating shared value. *Harv Bus Rev* 89(1–2):62–77
- Prashantham S, Birkinshaw J (2020) MNE–SME cooperation: an integrative framework. *J Int Bus Stud* 51:1161–1175. <https://doi.org/10.1057/s41267-019-00214-y>
- Pugliese E, Felice L, Passarelli M (2022) Innovation in a food SME to match the UN2030 sustainable development goals. *Procedia Comput Sci* 200:1715–1725. <https://doi.org/10.1016/j.procs.2022.01.372>
- Quinn RE, Thakor AV (2018) Creating a purpose-driven organization. *Harv Bus Rev* 96(4):78–85
- Raiborn C, Payne D, Joyner B (2013) Environmentally friendly business strategies BP—a case of rhetoric or reality? *J Bus Manag* 19(2):67–89
- Riba JR, Cantero R, Canals T, Puig R (2020) Circular economy of post-consumer textile waste: classification through infrared spectroscopy. *J Clean Prod*. <https://doi.org/10.1016/j.jclepro.2020.123011>
- Rubio-Andrés M, del Mar R-G, Sastre-Castillo MÁ (2022) Driving innovation management to create shared value and sustainable growth. *Rev Manag Sci* 16:2181–2211. <https://doi.org/10.1007/s11846-022-00520-0>
- Russo A, Sчена R (2021) Ambidexterity in the context of SME alliances: does sustainability have a role? *Corp Soc Responsib Environ Manag* 28(2):606–615. <https://doi.org/10.1002/csr.2072>
- Schaltegger S, Wagner M (2011) Sustainable entrepreneurship and sustainability innovation: categories and interactions. *Bus Strategy Environ* 20(4):222–237. <https://doi.org/10.1002/bse.682>
- Schaltegger S, Hansen EG, Lüdeke-Freund F (2016) Business models for sustainability: origins, present research, and future avenues. *Org Environ* 29(1):3–10. <https://doi.org/10.1177/1086026615599806>
- Schulz A, Kraus S, Demartini P (2011) Sustainable management of SMEs: a new approach to improve business and society. *Int J Strateg Manag* 11(1):44–58
- SDA Bocconi – School of Management Sustainability Lab (2022) *Fostering sustainability*. In: *Small and medium-sized enterprises*, White Paper, 2 edn. <https://www.sme-enterprize.com/white-paper/>. Accessed 15 Feb 2023
- Šebestová J, Sroka W (2020) Sustainable development goals and SME decisions: the Czech Republic vs. Poland. *J East Eur Cent Asian Res* 7(1):39–50. <https://doi.org/10.15549/jeeccar.v7i1.418>
- Shaji J, Apoorva Vikrant K (2020) Creating sustainable contribution to the environment: case studies from MSMEs in Pune. *Int J Soc Ecol Sustain Dev* 11(4):1–14. <https://doi.org/10.4018/IJSESD.2020100101>
- Smith H, Discetti R, Bellucci M, Acuti D (2022) SMEs engagement with the Sustainable Development Goals: a power perspective. *J Bus Res* 149:112–122. <https://doi.org/10.1016/j.jbusres.2022.05.021>
- Snow C, Thomas JB (1994) Field research methods in strategic management: contributions to theory building and testing. *J Manag Stud* 31(4):457–480. <https://doi.org/10.1111/j.1467-6486.1994.tb00626.x>

- Solow R (1992) An almost practical step toward sustainability. Resources for the Future, New York
- Stahl GK, Brewster CJ, Collings DG, Hajro A (2020) Enhancing the role of human resource management in corporate sustainability and social responsibility: a multi stakeholder, multidimensional approach to HRM. *Hum Resour Manag Rev* 30(3):1–16. <https://doi.org/10.1016/j.hrmr.2019.100708>
- Stewart R, Fantke P, Bjorn A, Owsianiak M, Molin C, Hauschild MZ, Laurent A (2018) Life cycle assessment in corporate sustainability reporting: global, regional, sectoral, and company-level trends. *Bus Strategy Environ* 27(8):1751–1764. <https://doi.org/10.1002/bse.2241>
- Stoian MC, Rialp J, Dimitratos P (2017) SME networks and international performance: unveiling the significance of foreign market entry mode. *J Small Bus Manag* 55(1):128–148. <https://doi.org/10.1111/jsnm.12241>
- Tseng ML, Wu KJ, Hu J, Wang CH (2018) Decision-making model for sustainable supply chain finance under uncertainties. *Int J Prod Econ* 205:30–36. <https://doi.org/10.1016/j.ijpe.2018.08.024>
- United Nations (2015) Transforming our World: the 2030 agenda for sustainable development. <https://sdgs.un.org/2030Agenda>. Accessed 15 Feb 2023
- United Nations (2020) The sustainable development goals report 2020. <https://unstats.un.org/sdgs/report/2020/>. Accessed 15 Feb 2023
- van Zanten JA, van Tulder R (2021) Improving companies' impacts on sustainable development: a nexus approach to the SDGs. *Bus Strategy Environ* 30(8):3703–3720. <https://doi.org/10.1002/bse.2835>
- Virmani N, Saxena P, Raut RD (2022) Examining the roadblocks of circular economy adoption in micro, small, and medium enterprises (MSME) through sustainable development goals. *Bus Strategy Environ* 31(7):2908–2930. <https://doi.org/10.1002/bse.3054>
- Weber CA, Current JR, Benton WC (1991) Vendor selection criteria and methods. *Eur J Oper Res* 50(1):2–18. [https://doi.org/10.1016/0377-2217\(91\)90033-R](https://doi.org/10.1016/0377-2217(91)90033-R)
- Wheeler D, Elkington J (2001) The end of the corporate environmental report? Or the advent of cybernetic sustainability reporting and communication. *Bus Strategy Environ* 10(1):1–14. [https://doi.org/10.1002/1099-0836\(200101/02\)10:1%3c1::AID-BSE274%3e3.0.CO;2-](https://doi.org/10.1002/1099-0836(200101/02)10:1%3c1::AID-BSE274%3e3.0.CO;2-)
- Whittaker DH, Fath BP, Fiedler A (2016) Assembling capabilities for innovation: evidence from New Zealand SMEs. *Int Small Bus J* 34(1):123–143. <https://doi.org/10.1177/0266242614548>
- Woodside AG (2010) Case study research: theory, methods, practice. Emerald Group Publishing, Bingley
- World Commission on Environment and Development (1987) Our common future. Oxford University Press, Oxford
- Wu C, Lin C, Barnes D, Zhang Y (2020) Partner selection in sustainable supply chains: a fuzzy ensemble learning model. *J Clean Prod*. <https://doi.org/10.1016/j.jclepro.2020.123165>
- Yin RK (2003) Case study research: design and methods, 3rd edn. Sage, London
- Yin RK (2017) Case study research: design and methods, 6th edn. Sage, London
- Youssef AB, Boubaker S, Omri A (2018) Entrepreneurship and sustainability goals: the need for innovative and institutional solutions. *Technol Forecast Soc Change* 129(C):232–241. <https://doi.org/10.1016/j.techfore.2017.11.003>
- Zhang Z, Zhu H, Zhou Z, Zou K (2022) How does innovation matter for sustainable performance? Evidence from small and medium-sized enterprises. *J Bus Res* 153:251–265. <https://doi.org/10.1016/j.jbusres.2022.08.034>
- Zheng X, Wang R, Hoekstra AY, Krol MS, Zhang Y, Guo K, Sanwal M, Sun Z, Zhu J, Zhang J, Lounsbury A, Pan X, Guan D, Hertwich EG, Wang C (2021) Consideration of culture is vital if we are to achieve the Sustainable Development Goals. *One Earth* 4(3):307–319. <https://doi.org/10.1016/j.oneear.2021.02.007>
- Zhou F, Wang X, Lim MK, He Y, Li L (2018) Sustainable recycling partner selection using fuzzy DEMATEL-AEWFVIKOR: a case study in small-and-medium enterprises (SMEs). *J Clean Prod* 196:489–504. <https://doi.org/10.1016/j.jclepro.2018.05.247>

Authors and Affiliations

Paola Castellani¹  · Chiara Rossato¹  · Elena Giaretta¹  ·
Alfonso Vargas-Sánchez² 

Chiara Rossato
chiara.rossato@univr.it

Elena Giaretta
elena.giaretta@univr.it

Alfonso Vargas-Sánchez
vargas@uhu.es

¹ Department of Management, University of Verona, Via Cantarane, 24, 37129 Verona, Italy

² Management and Marketing Department, Facultad de CC. Empresariales, Huelva University, Plaza de la Merced 11, 21002 Huelva, Spain