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Summary n. 1/2023

Editorial

*Salvatore Esposito De Falco**

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The world we live is characterized by rapid and discontinuous changes in social, economic, and technological landscapes. These extraordinary conditions have become ordinary, challenging organizations to adapt and navigate the "New Normal" (Loon et al., 2020).

As management scholars, it is crucial improve the ongoing issues that confront managers and bridge the gap between scholarly work and practical challenges.

Overall, the "New Normal" has accelerated digitalization and transformed the workplace and organizational practices. To thrive in this technology-driven era, companies need to embrace digital transformation and integrate technology into their operations (Kraus et al., 2022).

This entails adopting innovative practices and leveraging technology to enhance efficiency, collaboration, and decision-making. By embedding technology-driven practices, organizations can gain a competitive edge in the increasingly competitive business climate. For this reason, firms that engage in innovation activities are more likely to cope well with the challenges of COVID-19 as they benefit from better managerial know-how and increased attention to environmental conditions that allows them to efficiently reconfigure their assets and re-calibrate market operations (Krammer, 2022).

The transformative environment created by the pandemic calls for a fresh perspective on management studies. Traditional approaches may no longer be sufficient in the face of evolving challenges. Organizations must practice alternative approaches that enable them to adapt to the dynamic business climate. Studies recommend that organizations adopt innovative and flexible business models to generate added value for customers and other

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stakeholders as a survival and growth strategy (Singh et al., 2022). These approaches should promote flexibility, agility, and responsiveness to change while upholding the strategies and business models of organizations.

Finally, as we navigate the "New Normal", it is imperative for management scholars and practitioners to collaborate and address the practical challenges faced by organizations. This issue of the Journal emphasizes the need to adapt highlight the importance of technology integration, strategic reorientation, and innovative governance practices for organizations to adapt and thrive in the ever-changing business landscape.

By examining the validity of existing theories, redefining the purpose of companies, embedding technology-driven practices, and exploring alternative approaches in strategic management, organizations can effectively navigate the challenges and opportunities presented by the "New Normal". It is through these practical endeavors that we can bridge the gap between good theories in academic research and real-world issues; after all, "*good theory come from the engagement with problems in the world, not gaps in the literature*" (Kilduff, 2006 cited in Van Maanen, Sorensen and Mitchell, 2007, p. 1149)

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Introduction: Strategic Management in the new normal: Investigating practical approaches for an adapting governance

Nicola Cucari[*], *Matteo Cristofaro*[**], *Gabriele Santoro*[***]

Background and focus of the special issue

From time to time, organizational environments undergo cataclysmic upheavals – changes so sudden and extensive that they alter the trajectories of entire industries, overwhelm the adaptive capacities of resilient organizations, and surpass the comprehension of seasoned managers (Meyer et al., 1990, p. 93).

Despite the above quote being more than 30 years old, it perfectly describes the current social and business world we live in today (Ahlstorm *et al*., 2020; Hitt *et al*., 2020). Such discontinuous changes require entrepreneurial responses to allow organizations to navigate the new landscape provided by the "New Normal": a resilient adaptation to a new business environment, accepting coexistence with extraordinary social, economic, and technological conditions that became ordinary (Jabeen *et al*., 2022). A common and growing criticism is that management scholars' work does not address issues that confront managers and that, as a field, our scholarly work is separated from the ongoing issues we are confronted with.

This issue of the Journal aims to investigate the practical approaches allowing organizations to adapt their governance systems, strategies, business model, and strategic processes in the "New Normal".

We believe that valuable ways to find these practical answers are by

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investigating under which conditions some theories are still valid, as well as looking at the intersections of established theories. About the former, a series of managers and scholars still assume, for example, that planners and policymakers rationally govern large projects (Andersen *et al*., 2009). In contrast, it has already been advanced and proved that the governance of large projects is driven by bounded rational individuals affected by cognitive biases (Flyvbjerg, 2021; Flyvbjerg *et al*., 2009).

Yet, other scholars advanced that these distortions are not always detrimental but can help reach satisfying outcomes under some conditions (Gigerenzer and Goldstein, 1996). However, investigating the environmental features under which those biases are good or bad for governance and how to deal with them, in these turbulent times, is still in the infancy stage. From a practitioner perspective, companies need to reimagine the post-pandemic landscape, taking a long-term perspective, across five stages proposed by McKinsey (2020): *Resolve, Resilience, Return, Reimagination*, and *Reform*.

Therefore, new purpose of companies needs to be defined, considering the different stakeholders (Sancino *et al*., 2021). The purpose has "*to be open, broad, looking ahead, and seen from every aspect, not just focusing on profitability and shareholder value added, but it should also be communication to the society that an organization will exist to be part of something greater than itself, to do something meaningful, to create Stakeholder capitalism*" (Lhakard, 2022, p. 5).

In addition, the workplace and organizational practices should be different in a new normal and technology-driven practices need to be embedded within the organization (Carroll and Conboy, 2020; Singh *et al*., 2022).

For example, the pandemic created a transformative environment in which individuals and companies rapidly adopted digitalization (Bag *et al*., 2021). Under these conditions, the business climate has become more competitive, and corporations need to practice an alternative approach in corporate governance studies (Cucari *et al*., 2023).

Papers Selected for the Special Issue

Our special issue emphasizes the need for organizations to adapt to the "New Normal" characterized by rapid and discontinuous changes in the social and business environment. We highlight the importance of entrepreneurial responses and resilient adaptation to navigate the new landscape and all papers selected shed light on various aspects of organizational adaptation in the face of evolving challenges. Specifically, we stress on three most important aspects: the use of technology (Esposito *et al*., 2023; Secinaro *et al*., 2023), the

change on strategy practices (Makupa *et al*., 2023; Baiocco *et al*., 2023) and new forms of governance (Quarato *et al*., 2023; Raffaele, 2023).

A brief summary is reported below.

The paper titled "*An innovative approach for circular data-driven decision-making in the new normal scenario: opportunities for the agri-food sector*" by Esposito, Sica, Malandrino and Supino propose a new approach paving the way for reflections about the relevance of the development of data-driven decision-making for the circular transition in the new normal context. The authors draw attention to the pivotal and facilitating role of Digital Technologies to enable interconnections between operational and strategic approaches, exploiting the insights derived from the digital technologies use as decision-making and governance actions supporting tools in the agri-food sector.

The paper titled "*New technologies in supporting ESG criteria and the implementation in the new normal: mapping the field and proving future research paths*" by Secinaro, Calandra and Degregori provides a bibliometric and coding analysis on new emerging technologies supporting the Environmental, Social and Governance aspects (ESG) to identify the interdependencies and relationships between these two areas. The authors identify three main research clusters: (1) new technologies for emissions controls; (2) new technologies for sustainability assessment management; and (3) new technologies for disruptive energy management.

The paper by Mukupa, Cristofaro, and Giardino titled "*Workplace Inclusivity from a Strategy-as-Practice Perspective: A Systematic Literature Review*" offers a unique perspective on workplace inclusivity as a strategic practice. The authors argue that inclusivity enhances firm performance and sustainable competitive advantage. In particular, the paper reframes inclusivity as a strategic practice, providing valuable insights into its impact on firm performance and competitive advantage.

The paper titled "*Managing rural destinations in an evolving society: an empirical research*" by Baiocco, Leoni, and Paniccia addresses the urgent need for rethinking destination management models in the face of complex socio-economic and ecological challenges in the tourism industry. The paper proposes a co-evolutionary destination management model that considers the relationships and temporal dynamics between key actors within the destination ecosystem. The findings highlight the crucial role of sustainable entrepreneurship in destination development.

The paper titled "*Shared Leadership: a new normal for family businesses?*" by Quarato, Cambrea and Laviola investigates the effect of succession on the

performance of family firms characterized by collegial leadership and the moderating role of the board of directors and the size of the firm. The result, based on a sample of Italian family firms, support the hypothesis of an improvement of performance following shared leadership succession. A shared leadership succession turned out to be particularly suitable to manage succession gradually and smoothly, mitigating the abrupt impact that usually characterizes individual successions, which negatively impacts financial performance. However, the positive impact of these succession mechanisms can be sustained only if certain conditions are met.

The paper titled "*Virtual(-only) shareholders' meetings in Italian listed companies: quo vadis?*" by Raffaele focuses on the participation in the shareholders' meeting by means of telecommunications, with particular attention to the regulation of listed companies. Specifically, the topic of virtual(-only) meetings is addressed with a view both to investigating the reasons for their scarce use by Italian listed issuers, and to understanding whether the ability to intervene remotely can become a default rule in Italy. For example, the use of blockchain technology could further facilitate remote meetings, improving transparency, identification, and verifiability of votes, but expectations should be realistic regarding its ability to address all governance issues (Esposito De Falco *et al*., 2019).

Concluding remarks

Overall, the papers selected for this special issue contribute valuable insights into the practical approaches that organizations can adopt to successfully navigate the challenges of the "New Normal". In an environment characterized by constant change and uncertainty, these papers emphasize the importance of technology integration, strategic reorientation, and innovative governance practices.

Technology integration emerges as a key driver of organizational adaptation. The papers highlight the transformative role of digital technologies, data-driven decision-making, and emerging technologies in enabling organizations to make informed choices, enhance sustainability practices, and drive operational efficiency. By embracing technological advancements, organizations can gain a competitive edge and respond effectively to the evolving needs and expectations of their stakeholders.

Strategic reorientation is another crucial aspect emphasized by the papers. They underscore the need for organizations to reassess their strategies, business models, and practices in light of the dynamic landscape. Workplace

inclusivity, sustainable entrepreneurship, and co-evolutionary destination management models are proposed as strategic practices that can enhance firm performance and facilitate sustainable growth. These findings highlight the importance of strategic agility and the ability to adapt to changing circumstances.

In addition to technology and strategy, the papers shed light on innovative governance practices. They explore alternative leadership models, shared decision-making, and virtual participation in shareholders' meetings. By embracing these innovative approaches, organizations can enhance their decision-making processes, foster stakeholder engagement, and ensure transparency and accountability.

It is crucial for management scholars and practitioners to actively engage with ongoing issues and ensure that their work remains relevant and applicable to real-world contexts. This special issue serves as a catalyst for bridging the gap between theory and practice. The insights provided by the papers offer practical guidance for organizations seeking to thrive in the face of ongoing disruptions and uncertainty.

To succeed in the "New Normal", organizations need to embrace entrepreneurial responses, demonstrating agility, adaptability, and a willingness to explore new opportunities. Resilient adaptation becomes paramount as organizations navigate uncharted territory. By adopting a stakeholder-centric approach, organizations can reimagine their purpose, moving beyond mere profitability and shareholder value to contribute meaningfully to society and create a sustainable future.

In conclusion, the papers in this special issue highlight the importance of technology integration, strategic reorientation, and innovative governance practices for organizations to adapt and thrive in the ever-changing business landscape. By leveraging these insights, organizations can navigate the complexities of the "New Normal" and position themselves for long-term success in an environment characterized by ongoing disruptions and uncertainty.

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An innovative approach for circular data-driven decision-making in the new normal scenario: opportunities for the agri-food sector

Benedetta Esposito[*], *Daniela Sica*[**], *Ornella Malandrino*[***], *Stefania Supino*[****]

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Abstract

This conceptual paper aims to develop an approach that integrates the circular economy paradigm (4-R) with the new pathway proposed by McKinsey & Company for the post-Covid-19 renaissance (5-R) to reimagine the post-pandemic context as a new normal scenario. From an ecosystem perspective, the authors highlight the interconnections between this approach and the widely adopted theories in circular economy studies – the Stakeholder Theory and the Resource-Based View Theory – to provide a resilient model for decision-makers. In this context, the paper spotlight on how digital technologies can represent the enabling factor for implementing the newly proposed approach. In particular, the authors suggest that this approach could be applied within the agri-food sector, characterised by complex supply chains, to cope with future challenges and become more resilient in the new normal scenario. Our contribution is crystallised into a series of research propositions on the intersection between circular economy and digital technology in the data-driven decision-making literature.

Keywords: circular economy, digitalisation, agri-food, supply-chain, Covid-19, twin transition

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Sommario

Il presente lavoro si prefigge l'obiettivo di sviluppare un approccio concettuale che integri il paradigma dell'economia circolare (4-R) con il percorso per reimmaginare il contesto post pandemico, inteso come la nuova normalità, proposto dalla società di consulenza McKinsey & Company (5-R). In particolare, in un'ottica ecosistemica, gli autori evidenziano le interconnessioni tra questo approccio e le teorie ampiamente usate nella letteratura sull'economia circolare – la *Stakeholder Theory* e la *Resource-Based View Theory* – per fornire un modello resiliente ai *decision-makers*. In tale contesto, lo studio evidenzia come le tecnologie digitali possano rappresentare il fattore abilitante per l'implementazione del nuovo approccio proposto, come strumento a supporto dei processi strategici di *data-driven decision-making*. In particolare, gli autori suggeriscono l'applicazione di tale approccio al settore agroalimentare, caratterizzato da filiere oltremodo complesse, per far fronte alle sfide future attraverso l'adozione di modelli di business più resilienti e adattabili a tale contesto, complesso e in continua evoluzione. Il contributo sviluppa una serie di proposizioni di ricerca basate sull'integrazione dell'economia circolare e le tecnologie digitali, contribuendo ad un avanzamento della letteratura sul *data-driven decision-making*.

Parole chiave: economia circolare, digitalizzazione, filiera agroalimentare, Covid-19, transizione gemella

1. Introduction and background

The agri-food sector (AFS) is considered one of the most important sectors worldwide, accounting for US$ 9.43tn in 2023, with an expected growth of 6.21% *per* year (Statista, 2023). Recent studies have forecasted an increased volume growth of 5.1% in 2024 (Statista, 2023). These data show that, on the one side, in response to the crisis generated by Covid-19 and the Russia-Ukranian conflict, the AFS in the new normal context is rethinking its processes to become more resilient to crises, focusing its strategies on novel approaches that combine the economic, social and environmental requirements (Scandurra *et al*., 2023). On the other side, the growing population poses continuous challenges to match the food demand, increasing pressure on food production, safety and security and on the environment (Rowan and Galanakis, 2020). In fact, the AFS is called to manage problems related to resource scarcity and dependency on scarce resources, as well as costs reduction and processes efficiency to increase productivity and improve material and energy flows (Bocken *et al*., 2023).

From this perspective, agri-food organizations are engaged in guaranteeing a high level of food safety and security – through the reduction of po-

tential healthcare risks – and in addressing the environmental crisis by implementing sustainable business models and practices (Bocken *et al*., 2023; Sica *et al*., 2022). This sustainable transition has been guided by a relatively new production and consumption model which overcame the traditional "take-make-dispose" paradigm, fostering Circular Economy (CE) models based on Reduce-Reuse-Recycle-Recover (4-R) activities and strategies (Kirchherr *et al*., 2017). This paradigm has emerged as a feasible solution to maintain resources and minimize the negative externalities generated by production systems (Merli *et al*., 2018).

During the past decades, CE has gradually been embraced by agri-food firms, with a plethora of born-circular firms and start-ups that pioneer circular business models as well as projects and initiatives to support linear firms in the complex transition towards circular production and consumption models (Suchek *et al*., 2022). However, studies on CE in the AFS have shown several barriers to implementing a circular business model and radically changing their production systems (Mehmood *et al*., 2021).

Scholars have highlighted that one of the most recognized barriers to CE implementation is represented by technological barriers, constituting a prerequisite for CE implementation (Galvão *et al*., 2018; Mehmood *et al*., 2021). Digital Technologies (DT) allow firms, particularly agri-food firms, to produce and collect data to measure processes and guarantee high safety and hygiene standards, traceability and re-traceability. DT could also help firms monitor the impact of circular actions on process efficiency, particularly from a resource and energy management point of view. Furthermore, it has shown that DT can give momentum to a blooming CE, allowing collaboration, resource barter, and value co-creation for reuse and recycling practices (Blackburn *et al*., 2022). As suggested by Bocken *et al*. (2023), sustainable and digital transformation "are occurring in parallel, and synergies are needed for a positive transition to address global challenges" (p. 3). Indeed, DT could also support decision-making processes exploiting big data analyses' strategic relevance to identify key intervention areas for pursuing more restorative and regenerative business operations and to increase productivity and environmental performance (Jin *et al*., 2015; Gupta *et al*., 2019). However, literature has shown that the AFS has difficulties adopting technologies to support decision-making processes for shifting supply chains towards circular patterns (Sica *et al*., 2022).

Considering their relevance in this new normal scenario, many actions have been taken to face these technological barriers, particularly after the pandemic generated by the spread of the Covid-19 virus. In this perspective, the European Commission has stressed and supported the implementation of DT for the circular transition, defining the pathway towards sustainable development as a

"twin transition" in which the circular and digital shifts have a close interconnection, strengthening each other (European Commission, 2022).

In the new normal scenario, the double transition has to be undertaken at a triple bottom line level: individual company level, at the supply chain level, and above all, at an ecosystem level (Gupta *et al*., 2019; Blackburn *et al*., 2022). To efficiently shift from a linear economy to a circular one, scholars have stressed the relevance of adopting a value-cocreation and a resources management approach from an ecosystem perspective enabled by the use of DT (Calabrese *et al*., 2020). Therefore, the stakeholders engagement and the involvement of all the ecosystem actors becomes essential in order to develop an economic and production model in which efficiency losses in terms of raw materials, waste and energy loss are radically minimized.

In this context, after the spread of the Covid-19 virus, the consulting firm "Mckinsey & Company" has proposed a strategic approach based on Resolve, Resilience, Return, Reimagination, and Reform (5-R) to reimagine the post-pandemic context as a new normal context (Sneader and Singhal, 2020; Cucari *et al*., 2023). This approach conveyed to the agri-food supply chain (AFSC) and integrated into the 4-R CE paradigm can represent a theoretical and practical perspective for guiding agri-food firms toward sustainable development through value co-creation activated by DT. Starting from this background, this conceptual paper, adopting a theoretical approach that integrates the Stakeholder Theory (ST) and the Resource-Based View theory (RBV), aims to propose a new approach paving the way for reflections about the relevance of the development of data-driven decision-making for the circular transition in the new normal context. Furthermore, the authors draw attention to the pivotal and facilitating role of DT to enable interconnections between operational and strategic approaches, exploiting the insights derived from the DT use as decision-making and governance actions supporting tools in the AFS. The paper is structured as follows. After the introduction, the research method adopted to develop the conceptual paper is presented. The third section shows the underpinning theories on which the study is built, proposing a set of research propositions. The fourth section aims to develop and discuss the new approach in the agri-food supply chain (AFSC) context. Lastly, implications for decision-making, limitations and future research directions are presented.

2. Research method

Starting from the research method adopted by Hulland (2020) and De Angelis *et al*. (2023), the present paper is developed following several steps

related to studying, re-reading, discussing, summarizing, formalizing, hypothesizing and collecting feedback in order to build the theoretical argumentation (Cornelissen *et al*., 2021; Hulland & Houston, 2020). Accordingly, using existing theories has allowed researchers to conceptualize and develop propositional reasoning to gradually go in-depth into the "underlying causal forces or mechanisms that explain the manifestation, dynamics, and outcomes of the topic" (Cornelissen *et al*., 2021, p. 6).

Growing on this approach, this conceptual paper aims to spawn, in the light of the RBV theory and ST, an integrative theoretical framework that combines the strategic approach to managing the post-pandemic renaissance in the "new normal" context (5-R), with the operational and strategic paradigm for the CE transition (4-R), attempting to provide a plausible explanation of the critical role of DT in building interconnections among strategies and actions.

In particular, based on De Angelis *et al*. (2023), the authors have developed a conceptual paper through the development of the following research steps, detailed in Table 1: i) identify the research scope and domain; ii) integrate and summarise existing related knowledge and scientific advancement; iii) manage discrepancies; iv) highlighting gaps in the existing literature; and v) suggest future research directions.

To answer the research objective, a narrative approach to the literature review has been adopted, rather than a systematic one, considering the relevant role of researchers in selecting and defining the significant literature for the research goal (Cronin & George, 2020). This approach is considered appropriate for theory building in business research (Sovacool *et al*., 2018; Snyder, 2019) and extensively used in previous circular economy research (Ritala *et al*., 2021; De Angelis *et al*., 2023).

Tab. 1 – Steps in conceptual development

Key steps	*Features of this study*
Defining domain and scope	Domain: How can literature advance understanding of the interconnections between CE and DT to reimagine the AFS in the new normal scenario? Scope: CE and DT in AFS after the Covid-19.
Integrating and summarizing existing knowledge	ST, RBV, CE and 5-R
Identifying and solving inconsistencies	Inconsistency$_1$: McKinsey 5-R strategies for the post-pandemic renaissance are not currently analyzed in combination with CE. Inconsistency$_2$: DT has been extensively investigated in the literature relating to CE transition or post-pandemic recovery in the AFS. However, they have not been analyzed in combination. In our conceptual paper, DT is seen as the *trait d'union* between the circular transition and the decision-making processes for the AFS renaissance in the new normal scenario.
Highlighting gaps and generating insights	Literature has provided few contributions on the perspective of analysis that combines theories, models and approaches to the base of this research.
Proposing a research agenda	A set of research propositions has been provided.

Source: Adopted from De Angelis *et al*. (2023) and Hulland (2020)

3. A new approach for decision-making in the new normal scenario

The following section provides a combined application at the AFSC of the 4R paradigm and 5R strategies through DT, highlighting the relevance of the combined use of RBV and ST in decision-making strategies development adaptable in a constantly changing new normal scenario. Furthermore, the 5R stages will be described, highlighting the role of CE in speeding up the resilience pathway for companies from a decision-maker's perspective. Starting from the literature analysed, the authors have developed three research propositions representing the pillars of the theoretical approach proposed in this conceptual paper.

3.1. Theoretical perspective for the circular decision-making

Starting from two interdependent theories adopted within the CE studies – ST theory and RBV theory – the authors have identified the existing interconnections to support circular decision-making processes.

Starting from the beginning of the new millennium, ST has been widely adopted in sustainability studies both from a managerial and accounting perspective (Phillips and Reichart, 2000; Steurer *et al*., 2005; Samant and

Sangle, 2016). Recently, scholars have recognized the relevance of this theoretical approach in understanding how to implement CE in organizations (i.e., Baah *et al*., 2023; Shah and Bookbinder, 2022). Some researchers have demonstrated that the transition from a linear economy to a circular one demands a collaborative view in strengthened natural capital, optimizing resource yields and minimizing consequential negative effects on the environment and society as a whole (Flynn *et al*., 2010; Min *et al*., 2015; Autry & Griffis, 2008; Gupta *et al*., 2019). Accordingly, CE has been defined as a "collective solution which cannot be successfully implemented in isolation" (Antikainen and Valkokari, 2016, p. 8). In fact, any weak link in the supply chain would render the effort unless. Nevertheless, stakeholders show resistance and uncertainty to shift towards CE.

In the CE field, some researchers have focused their studies on a specific element of stakeholder engagement, such as i) the stakeholder pressure management in CE implementation (i.e., Jakhar *et al*., 2019; Pinheiro *et al*., 2022) and ii) stakeholder influences in building CE strategies (i.e., Govindan and Hasanagic, 2018; Marjamaa *et al*., 2021; Wang *et al*., 2022). In comparison, only a few cutting-edge research has considered stakeholder engagement from a triple-bottom-line perspective, highlighting their role in improving both economic and environmental efficiency and in reaching the circular transition global goal (i.e., Shirvastava and Guimares-Costa, 2017; Bertassini *et al*., 2021; Salvioni and Almici, 2020; Kujala *et al*., 2022). Thus, to successfully develop CE models, there is a need to focus research on the stakeholders' engagement and understand their relationship (Thomson and Bebbington, 2005).

However, literature has extensively explored the adoption of CE models from a resource standpoint (e.g., Aranda-Usòn *et al*., 2019; Jabbour *et al*., 2019; Jakhar *et al*., 2019; Mishra *et al*., 2021; Nandi *et al*., 2021; Chaudhuri *et al*., 2022; Munch *et al*., 2022; Samadhiya *et al*., 2023). One of the most widely adopted and rigorous theories to explain the impact of CE practices on a firm's performance is the RBV theory. Managing resources from a circular perspective can support firms in developing and sustaining a competitive advantage (Barney, 1991; Amit and Schoemaker, 1993). Barney (2018) argues that valuable, rare, inimitable and non-substitutable tangible and intangible resources can lead companies to improve their performance. Thus, from a circular perspective, improving resource efficiency by implementing 4-R practices and extending the total material life cycle is an excellent opportunity for companies motivated to implement CE business models (Kristoffersen *et al*., 2021).

Given these premises, although these theories differ in their perspectives and specificity, they share the same objectives: explain how companies ensure survival and growth – becoming more resilient in a changing context –

and what are the main reasons that motivate organizations to adopt CE practices (Chen and Roberts, 2010).

Some scholars have started investigating the interlinkages between the ST and RBV, emphasizing a "long-emerging convergence" (Barney, 2018; Freeman *et al*., 2021; McGahan, 2021). In particular, Freeman *et al*. (2021) have investigated how the ST can inform the RBV theory, incorporating the following principles: normativity, sustainability, people and cooperation. More specifically, they argued that this combined approach enlarges the RBV, including ST elements such as values, norms and ethics, and the role of people seen as an end and not a mean, which were completely absent in the traditional RBV theory. In this new perspective, sustainability represents a key point of overlap between ST and RBV. In fact, the sustainable management of resources and stakeholder relationships constitute themselves a source of sustainable competitive advantage that is difficult to imitate, much like a scarce resource (Freeman *et al*., 2021).

In order to activate these value co-creation mechanisms, a need to share data, information and principles among supply chain actors emerges to support the decision-making process towards the development of new business models and offer consumers and stakeholders clear information. In this light, DT could enhance transparency and reliability in managing resources and sharing data and information to align stakeholders around common circular goals and create circular governance and decision-making procedures (Gupta *et al*., 2019).

Following this ecosystemic perspective, our first preposition is developed as follows:

> **P1.** A holistic perspective that integrates a stakeholder-based and resource-based approach to decision-making could facilitate the transition towards circular supply chains.

3.2. 5R pathway guiding progress towards the new normal scenario

The economic, social, and cultural changes derived from Covid-19 have posed a significant threat to the enterprise system. In fact, companies are called to understand their contexts of reference, which are continuously changing in an intense, fast, but also unstable way. This new era of extraordinary change presents businesses, managers, and academics with an ongoing challenge: to adapt, endure, and compete in a never-normal environment (Golinelli and Quattrociocchi, 2021).

In this perspective, the McKinsey & Company consulting group have tried to provide a framework to support companies in developing a resilient adaptation to a different corporate setting, understanding and admitting the

presence of extraordinary and unusual social, economic, and technological conditions that have become usual, blurring the new normal contours (Jabeen *et al*., 2022). In particular, McKinsey has proposed a five-stage process to redesign the post-pandemic landscape: Resolve, Resilience, Return, Reimagination, and Reform, as detailed in Table 2 (Sneader and Singhal, 2020).

Tab. 2 – The 5R pathway

R phase	*Description*
Resolve	It refers to the need for managers to interrupt inaction and paralysis conditions in making decisions in an emergency and post-emergency situation.
Resilience	It is predominantly linked to financial resilience. Accordingly, private, public and social sector leaders are called to make "through cycle" decisions to balance economic, environmental and social sustainability.
Return	It relates to companies' challenges in restoring operational health. To this end, the engagement of the whole supply chains, reactivating cooperation mechanisms, despite the geographical disruption caused by the pandemic, became vital for decision-makers' long-term success.
Reimagination	In this stage, decision-makers must reimage their business models to be aligned with the new normal context.
Reform	It represents the final stage of a renaissance process in which managers must build up the system to endure severe and worldwide exogenous shocks, such as the Covid-19 impact.

Source: Adapted from McKinsey & Company (Sneader and Singhal, 2020).

All these five stages companies are called to pass through can vary from a temporal point of view depending on the type of company or can coexist simultaneously. In both cases, the final goal is represented by the opportunity to provide a clear path that managers must follow in the journey towards the new and never normal that the pandemic has begun.

The 5R approach to the new normal renaissance substantially affects decision-making and governance mechanisms (Cucari *et al*., 2023). In this context, the development of sustainability and circular economy strategies could greatly benefit decision-makers going into the 5R phases to strengthen their resilience, not only in the context of the new normal but also in the context of the future normal from a forward-looking perspective.

In this light, scholars have argued that if applied holistically, CE principles offer trustworthy solutions to most of the structural vulnerabilities uncovered by Covid-19 (Ibn-Mohammed *et al*., 2021). Furthermore, it has been theorized that "accidental" or pandemic-induced CE strategies can be institutionalized or exploited to generate future possibilities for resilience and competitiveness (Joshi and Sharma, 2022; Esposito *et al*., 2023a).

Hence, our second preposition is as follows:

P2. The adoption of CE principles in the decision-making processes could accelerate and facilitate the pathway towards the post-Covid-19 renaissance, seizing opportunities that may arise.

Following the same purpose – strengthening the resilience of companies and their ability to adapt to changing scenarios – some academics have emphasized on the role of DT in improving the adaptability decision-makers and decision-making preparedness in the face of epochal changes such as the ones we are currently experiencing (e.g., Lee *et al*., 2021; Järvenpää *et al*., 2021; Mboli *et al*., 2022; Shennib and Schmitt, 2021; Yazdani *et al*., 2021). Notwithstanding, the vast opportunities and action-windows for the twin transition, scholars and practitioners are still exploring how to successfully implement DT to strive in the decision-making processes for the circular transition (Ciccullo *et al*., 2021; Pakseresht *et al*., 2022).

From this background, it seems evident how CE and DT, implemented synergistically, can support managers in crossing the journey towards the new normality, enhancing flexibility and adaptability in the decision-making processes.

Accordingly, our last preposition is provided as follows:

P3. Implementing DT could catalyze the circular transition, allowing managers real-time and data-driven decision-making in a mutable new normal scenario.

4. Challenges for the agri-food sector and conclusions

4.1 Opportunities for the agri-food sector

The new proposed approach could be widely applied within the AFS, characterised by complex supply chains, to cope with future challenges and become more resilient to crises. Indeed, the AFS is one of the most significant environmental systems due to the burdens it imposes, but it is also relevant due to its social, cultural, and economic dimensions (Brankatschk and Finkbeiner, 2014). Consequently, agri-food companies are required to develop circular business models tailored to the features of each supply chain, thereby increasing the complexity of the ongoing circular transition process.

Organizations face challenges associated with adopting CE strategies and identifying methods to establish business models that optimize the use of resources and improve productivity and systemic efficiency, allowing them to gain new competitive spaces (Poponi *et al*., 2022).

Thereby, circularity entails complex challenges involving multidisciplinary issues, regulatory aspects, and empirical knowledge, prompting the active participation of all actors in the entire supply chain. Particularly, the decision-making process surrounding sustainability and circular issues

must be sustained and guided by reliable data. In fact, accurate information conveyed transparently and straightforwardly promotes the proliferation of more conscious data-driven decision processes.

In this scenario, organizations must make visible the enhancement of the socio, economic and environmental performance and engage and share their circular strategic decisions with stakeholders. Furthermore, firms must implement lean business processes that respond to and cope with a swiftly changing environment to generate value from a sustainability standpoint. Thus, new business models that may transform AFS's competitive landscape can be grown, which benefits the environment and the organization's reputation.

With a substantial contribution from DT, this approach enlarges the business processes management by going beyond the mere development of strategies exclusively oriented to the target of overcoming the post-pandemic period or implementing circular models. Indeed, data and information obtained from adopting DT within the AFSC could support managers in reaching both goals, enabling the robustness and resilience of the system. Indeed, the possibility to track the environmental impacts, the resources used, and the stakeholders engaged during the entire AFSC life cycle in real-time provides objectivity in assessment processes and – in turn – develops strategies and policies to face the actual supply-chain critical issues. For instance, the innovative proposed approach can be considered a bridge between the traditional approach to decision-making processes that characterised the pre-pandemic period and the required flexible, adaptable and inclusive approach to the new normal scenario, saving time and resources. In this context, several challenges to agri-food managers are arising, mainly linked to accepting this new approach from a bottom-up perspective. Indeed, all the AFSC actors, particularly workers, employees, suppliers and clients, have to share the principles and values on which this approach is built, accepting the resulting innovations that impact standardized organizational routines and processes. Consequently, managers could create a shared value for the supply chain in this transition process.

In conclusion, the challenge for the AFS will be the widespread adoption of this new approach in the various phases of the AFSC, making organizations aware of its numerous and different benefits.

4.2 Conclusions and future research directions

This conceptual paper has provided an overview of the state-of-the-art research on CE and DT in the AFS from the crisis generated by the outbreak until the new normal scenario. More specifically, the authors have attempted to provide reflections on the role of DT and CE to push agri-food

companies in passing through the 5 R stages proposed by McKinsey & Company to survive and compete in such an ever-evolving scenario, defined by Barile *et al*. (2022) as a never normal. In particular, the use of DT to orient the decision-making processes, providing real-time and reliable insights, is useful for governance from a twofold perspective. On the one hand, receiving information about the impact of emergencies, like the pandemic, on agri-food companies' activities allows managers to take effective decisions to mitigate any reflections on productivity and profitability. On the other hand, managers could define policies and actions to make processes more efficient by monitoring processes in terms of material flow, energy use, and environmental impact. This would minimize the costs associated with using virgin raw materials, reduce the use of non-renewable energy and water, and reduce the emission of greenhouse gases, as well as their environmental effects in terms of water footprint and carbon footprint. Furthermore, this conceptual paper has revealed that the adoption of CE practices as an imposed innovation (Esposito *et al*., 2023b), could entail the AFSC survival, allowing firms to recover, resolve and reimagine the sector.

Covid-19 has brought attention to the robust agri-food industry's role as an engine of an adaptable economy, encouraged consumer behavior change, sparked demand for supply chain diversification and circularity, and illustrated the efficacy of public policy in addressing pressing socioeconomic crises (Ibn-Mohammed *et al*., 2021). In particular, the use of DT, also stimulated by the policies and actions taken by governments, is emerged as means to activate virtuous mechanisms within the AFSC among stakeholders and supply chain actors – from an ecosystem perspective – to foster the resilience of the whole system. To this end, managing the resource flows in input and output, from a data-driven perspective, through implementing, reducing, reusing, recycling and redesigning actions and policies represents a pivotal issue in triggering the twin transition.

Managers and decision-makers may rely on our reflections to define investments pathway in digital and climate-resilient infrastructures in order to succeed in the transition to a circular and low-carbon economy that can create in parallel jobs and increase environmental and economic benefits. Policymakers could also support the AFS in providing financial incentives, career paths for skill development, and professional figures with DT and CE experience.

Furthermore, this conceptual paper has shed light on the potentiality related to the integrated application of the RBV and ST for the twin transition. Accordingly, scholars can rely on our reflections to explore the theoretical mechanisms this transition could entail.

However, this study has limitations, which could be the starting point for future research directions. Firstly, this paper attempts to reflect on the

decision-making process from a general perspective without exploring the impact of DT on the various phases in which decisions are structured. Accordingly, future research may investigate the impact of data-driven insights in decision-making. Moreover, scholars may explore their effects on corporate governance mechanisms to guide the sustainable and circular transition (Lagasio & Cucari, 2019; Ludwing & Sassen, 2022). Second, the research is focused on the AFS, providing reflections on the AFSC. Future studies may apply the twin-R approach to other industries, highlighting the peculiarities of different supply chains. Lastly, future studies may adopt different theoretical perspectives, such as the viable-system approach to explore the interconnections that DT may activate among managers and stakeholders to catalyze the CE transition in the new normal scenario.

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New technologies in supporting ESG criteria and the implementation in the new normal: mapping the field and proving future research paths

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Abstract

This paper provides a structured literature review (SLR) on new emerging technologies supporting the Environmental, Social and Governance aspects (ESG) to identify the interdependencies and relationships between these two areas. Using a rigorous methodological approach, the study summarises the state of the art of the past literature on the topic, which has grown significantly in importance in recent years. The analysis has been conducted on 204 papers extracted from the Scopus database using the Blibliometrix R package. Additionally, using the SLR road, we provide a bibliometric and coding analysis focused on papers published in different academic journals in the business management and accounting field. Our results discover three strands of research: new emissions control technologies, new sustainability assessment management technologies, and disruptive energy management technologies. These results demonstrate the originality of the paper that resides in a novel analysis concerning the recent role played by innovation technologies in sustainability. The study reveals the need for more holistic research and an integrated framework that consider the technological aspects related to ESG criteria, and not consider the two separately as in the present literature. Related to that, there is also the demand for a deeper exploration about the role that new technologies play in the various sustainability initiatives. Finally, the article addresses future research perspectives and paths as joint scholars and practitioners' analysis.

Keywords: Sustainability, ESG, new technologies, climate change, technological innovation, sustainable development

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Sommario

Il presente lavoro fornisce una revisione strutturata della letteratura (SLR) sulle nuove tecnologie emergenti a supporto degli aspetti ambientali, sociali e di governance (ESG) per identificare le interdipendenze e le relazioni tra queste due aree. Utilizzando un approccio metodologico rigoroso, lo studio riassume lo stato dell'arte della letteratura passata sull'argomento, la cui importanza è cresciuta in modo significativo negli ultimi anni. L'analisi è stata condotta su 204 articoli estratti dal database Scopus utilizzando il pacchetto R Blibliometrix. Inoltre, utilizzando la strada SLR, forniamo un'analisi bibliometrica e di codifica incentrata su articoli pubblicati in diverse riviste accademiche nel campo della gestione aziendale e della contabilità. I nostri risultati hanno evidenziato tre filoni di ricerca: nuove tecnologie di controllo delle emissioni, nuove tecnologie di gestione della valutazione della sostenibilità e tecnologie di gestione energetica dirompenti. Questi risultati dimostrano l'originalità del lavoro, che risiede in un'analisi inedita del recente ruolo svolto dalle tecnologie innovative nella sostenibilità. Lo studio rivela la necessità di una ricerca più olistica e di un quadro di riferimento integrato che consideri gli aspetti tecnologici legati ai criteri ESG e non li consideri separatamente come avviene nella letteratura attuale. In relazione a ciò, vi è anche la richiesta di un'esplorazione più approfondita del ruolo che le nuove tecnologie svolgono nelle varie iniziative di sostenibilità. Infine, l'articolo affronta le prospettive e i percorsi di ricerca futuri come analisi congiunta di studiosi e professionisti.

Keywords: Sostenibilità, ESG, nuove tecnologie, cambiamento climatico, innovazione tecnologica, sviluppo sostenibile

1. Introduction

Environmental, social, and governance (ESG) considerations have become increasingly important for businesses and investors in recent years. Integrating ESG factors into business practices and investment decisions promotes sustainable development and mitigates risk. New technologies have the potential to play a significant role in advancing ESG goals being a new normal for businesses. For example, artificial intelligence (AI) is increasingly used to support ESG development (Sætra, 2021). AI is becoming a key enabler of the digital transformation (Holmström, 2022). One fundamental application of AI in ESG is analysing ESG data (Macpherson *et al.*, 2021). With a large amount of data available on environmental and social metrics, AI can identify patterns, trends, and risks that may not be immediately apparent to human analysts (Breeman, 2021). AI algorithms can also be trained to scan new articles and social media posts for ESG-related content. This allows real-time monitoring of stakeholder sentiment and emerging issues or helps develop ESG assessment (Sætra, 2023). Furthermore, AI can also be used to support ESG goals by developing new products and services. For example, AI-powered energy management systems can help companies to reduce their carbon footprint and lower energy costs (Crawford, 2021). Similarly, AI can optimize supply chain

operations and reduce waste, contributing to environmental and social goals (Dash *et al.*, 2019). Another interesting technology is the blockchain. For instance, it is widely adopted to improve supply chain transparency, while artificial intelligence can help identify ESG risks and opportunities. Additionally, the emergence of renewable energy technologies and the increasing availability of environmental and social metrics data provide new ways to measure and monitor ESG performance using blockchain (Calandra *et al.*, 2023). As such, understanding the role of new technologies in ESG development is becoming increasingly important for businesses, investors, and policymakers (Secinaro *et al.*, 2021). Therefore, new technologies may boost ESG adoption and accountability, giving more powerful tools to create, manage and implement a new normal road for businesses (Stein Smith, 2020).

In general, we are experiencing a growing awareness of the importance of integrating environmental, social and governance considerations into business practices and investments decisions. As ESG factors have gained prominence, there is a need to understand the role of new technologies in achieving ESG goals and driving sustainable development.

Despite the widespread interest in new emerging technologies, it is difficult to observe a holistic bibliometric framework regarding the broader concept of these new technologies in ESG management. Therefore, the study offers a structured literature review (SLR) starting from a constructivist framework based on sound theoretical findings that frame ESG management as a development factor and aims to provide evidence about the most relevant variables in the literature, such as authors, citations, journals, and countries of publication (Lim *et al.*, 2022; Macchiavello & Siri, 2022). Our analysis will benefit from the paper of Massaro *et al.* (2016) and Paul & Criado (2020), which aim to create a transparent and reliable analysis to be updated by other researchers. Additionally, using cluster analysis, we will foster the exploration of the scientific debate in this field. We adopt the "Bibliometrix" R package (Aria & Cuccurullo, 2017). Adopting a structured keyword search methodology thoroughly analysed in the methodology section, this article explores 240 sources.

The study identifies two main research questions that aim to answer (Massaro *et al.*, 2016) and that can be expressed as follows:

RQ1. What are the main bibliometric variables (citations, sources and keywords) related to new technologies supporting ESG management?

RQ2. In what areas are such technologies most likely to be applied?

The first research question aims to define the "state of the art" in the literature about the emerging technologies that allow the identification and

monitoring of ESG aspects. The second research question can guide the researchers to use such technologies to comply with ESG criteria.

The research analysis aims to define state-of-the-art in the literature by examining emerging technologies that identify and monitor ESG aspects. This provides a comprehensive overview of some of the most important technological tools available for ESG management, which can be valuable for researchers and practitioners. Furthermore, the research seeks to identify the areas where these new technologies will most likely be applied in ESG management. By uncovering potential applications, the research offers insights into how these technologies can be used to comply with ESG criteria and address climate change issues and sustainability agendas.

Our article has interesting implications. Regarding theoretical elements, we provide an initial discussion on technological tools for ESG management using bibliometric variables useful for researchers in starting new projects and writing future studies. Additionally, our analysis identifies some relevant implication that links sustainability assessment and the accountability field.

Regarding practical implications, our study aims to foster technological applications using different kinds of technologies, depending on the field of application, for ESG management in addressing new climate change issues and agendas. For example, we found that the agriculture sector makes extensive use of AI (Das *et al.*, 2018) as well as blockchain technology can be used to improve sustainability assessment management practices, providing different data and information depending on specific needs (Shojaei *et al.*, 2019). At the same time, many of the engineering technologies available today contribute to increased electricity efficiency (Baggini, Sumper, 2012).

The study will proceed as follow. Section 2 gives an overview of the methodological workflow followed by the research team. Section 3 provides an in-depth data interpretation, comments, and critique of the main findings. Finally, section 4 discusses and concludes the article with a summary of the current state-of-the-art and recommendations for possible future research directions.

2. Methodology

The paper adopts a hybrid methodology to facilitate a rigorous qualitative and quantitative examination of studied sources, combining bibliometric and code analysis (Cobo *et al.*, 2011; Massaro, Dumay, *et al.*, 2016). This method is based on the structured literature review (SRL) that requires sequenced and replicable processes (Tranfield *et al.*, 2003). According to Secinaro *et al.* (2021) and Zupic & Čater (2015), the bibliometric approach considers a series of

variables such as years, documents' information, sources, authors, keywords, citations, and countries. Additionally, coding analysis allows further investigation and gathering of data on other elements such as definitions, research methodologies, accounting and accountability implications, emerging technologies and connections with ESG criteria (Moher *et al.*, 2009; Secinaro, Dal, *et al.*, 2021). Combining such two analysis sources may allow a holistic overview of specific research flows.

According to the literature (Christoffersen, 2013; Dumay & Cai, 2014; Massaro *et al.*, 2015; Thorpe *et al.*, 2005), there are various approaches for identifying the article to review and, in this case, the method adopted is based on five crucial steps:

1) Definition of the research questions that the literature review aims to answer;
2) Write research protocol;
3) Determine the type of papers to analyze;
4) Develop a coding framework;
5) Perform critical analysis and discussion, identifying future research and path.

The first step is defining the two research questions the study aims to answer (Massaro *et al.*, 2016). Then it would be essential to write a research protocol containing the definition of information sources, the methods adopted, the mean and tools used for testing and synthesizes the studies (Petticrew & Roberts, 2006). Table 1 illustrates the review protocol and the different steps into which it is divided, including the main topic, the motivation of the choice, dataset creation and the tools used to implement the analysis.

The third step would be to determine the different kinds of sources and studies included and carried out in the literature review, using the scientific database Scopus (Mishra *et al.*, 2017).

Afterward the fourth phase has the objective of defining the items to be examined in the selected papers through the setting up of a coding framework. The study identified the following items for coding:

1) *Timing of publication*: the evolution over the time of the number (Nr) of papers;
2) *Geographic distribution of papers*: papers distribution among countries;
3) *Journals*: distribution of papers among journals and citations received;
4) *Author and citations analysis*: number of citations of articles, citations per year, citations per year (CPY) ranking;
5) *Relevant keywords and topics*: the most frequent of authors' keywords used.

Table 1. Research review protocol

Research protocol elements	Author's consideration
What is already known?	There is a strong demand to investigate what are the new and emerging technologies that assist in fulfilling and monitoring ESG criteria (Li *et al.*, 2021). Nowadays, people's attention is increasingly shifting towards the need to act in a responsible and sustainable direction in order to ensure that organisations have their place in the economy in the long term (Zumente & Bistrova, 2021). The emphasis is also growing on the preservation of long-term stakeholder value and sustainability (Bistrova & Lace, 2012).
Motivation	ESG aspects are becoming fundamentally important within the international framework in order to reduce atmospheric pollutant emissions and align with globally established targets. There is a potential for a bibliometric and open coding analyses examining which are the emerging technologies that can be used in the implementation of ESG-compliance models for different sectors.
Research topic	The study deals with two different areas of research. On the one hand, the analysis of new technologies available on the market, highly investigated in many papers and articles as they are applicable to a plurality of contexts. On the other hand, ESG criteria and the need to find new methods to measure and manage them. **RQ1:** What are the main bibliometric variables (citations, sources and keywords) related to new technologies supporting ESG management? **RQ2:** In what areas are such technologies most likely to be applied?
Journal's research	It was decided not to limit the research to individual scientific journals because of the still young purpose (Secinaro, Dal, *et al.*, 2021). The analysis included articles and peer-reviewed journals (Easterby-Smith *et al.*, 2012). In addition, the study selected business, management and accounting sources from Scopus database to extract all relevant information sources (de Villiers & Dumay, 2014).

Source: Authors' elaboration

6) *Geographic distribution of papers*: papers distribution among countries;
7) *Journals*: distribution of papers among journals and citations received;
8) *Author and citations analysis*: number of citations of articles, citations per year, citations per year (CPY) ranking;
9) *Relevant keywords and topics*: the most frequent of authors' keywords used.

Finally, the last phase of SRL aims to perform a critical analysis and discussion of the selected sources, identifying future research and path. This critical final step is combined with a bibliometric analysis in order to minimize errors and to increase the value of the research outcomes (Fahimnia *et al.*, 2015; Feng *et al.*, 2017). The research team conducted a keywords analysis to investigate appropriate scientific information about emerging technologies connected to ESG criteria (Bamel *et al.*, 2021; Bedford, 2015; Fteimi & Lehner, 2018). Hence, we used the following keywords research string within the Scopus database:

(TITLE-ABS-KEY (esg) OR TITLE-ABS-KEY (sustainability) OR TITLE-ABS-KEY ("climate change") AND TITLE-ABS-KEY (accounting) OR TITLE-ABS-KEY (auditing) OR TITLE-ABS-KEY (accountability) AND TITLE-ABS-KEY ("technolog") OR TITLE-ABS-KEY (blockchain) OR TITLE-ABS-KEY ("artificial intelligence") OR TITLE-ABS-KEY ("machine learning") OR TITLE-ABS-KEY ("deep learning") OR TITLE-ABS-KEY (supercomputing) OR TITLE-ABS-KEY ("edge computing") OR TITLE-ABS-KEY ("data storage") OR TITLE-ABS-KEY ("distributed ledger technologies") OR TITLE-ABS-KEY ("cloud computing")) AND (LIMIT-TO (SUBJAREA , "BUSI")) AND (LIMIT-TO (DOCTYPE , "ar") OR LIMIT-TO (DOCTYPE , "re")) AND (LIMIT-TO (LANGUAGE , "English")) AND (EXCLUDE (PUBYEAR , 2023)).*

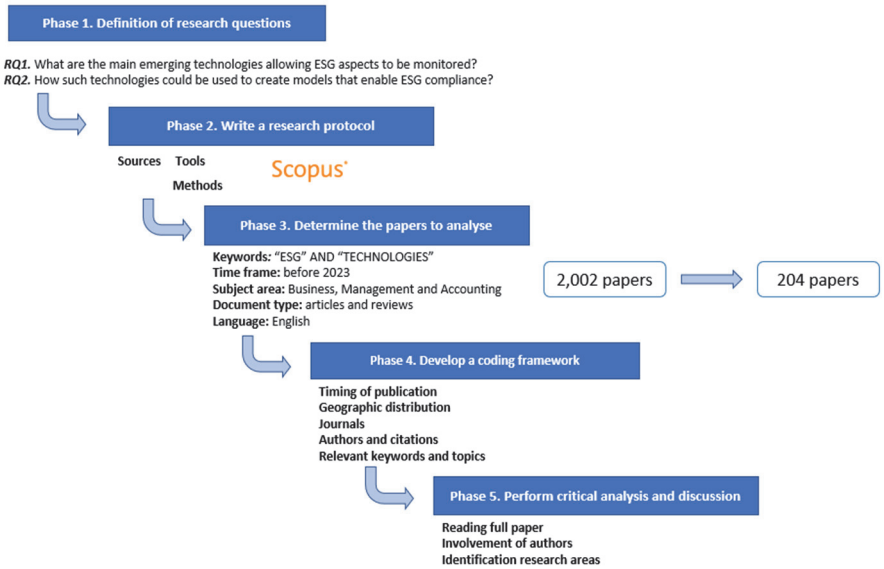
Furthermore, to refine the search process, we included some limitations, such as considering only peer-reviewed articles and reviews written in English. All documents were selected within the business, management, and accounting areas because the RQs are strictly related to these fields. These criteria result in being reproducible, comprehensive, and unbiased.

First, we obtain a working list of 2,002 documents from the previous search string. Considering only the business, management, and accounting fields, we gather 305 results. Then, after applying the document type limitation, only 215 peer-reviewed articles and reviews remain. Finally, we considered only papers published in English, about 204 results before 2023.

Figure 1 represents the complete process of paper selection:

1) A total of 2,002 papers emerged from the Scopus database, using the previous search string;
2) A total of 305 papers and articles resulted considering only the business, management, and accounting fields;
3) There were 204 results after selecting only peer-reviewed articles and reviews before 2023, written in English.
4) A CVS format file was extracted with the following items: title, abstract, author(s), authors' keyword, number of citations, years, affiliation, sources and references.

Figure 1. *Research design and phases*



Source: Author's elaboration

3. Research findings

This section presents the main evidence from the systematic literature review, answering the previous research questions. The remaining section is structured in two parts: a bibliometric analysis of the selected papers and a content analysis concerning a deeper insight into the selected papers.

3.1. Main information, citations, and countries' collaboration

Table 2 illustrates the main information about the data under analysis. The articles are published in 100 different sources, such as journals, books, etc. The average publication rate was 5.95 articles per year during the relevant publication period. Furthermore, each document was cited approximately 33 times. The average of 804 keywords shows the relevance of this topic, which is not considered in many different research fields (Bhatt *et al.*, 2020; Secinaro & Calandra, 2020). Additionally, the average of co-authors' articles (3,25) confirms that the purpose of the research is particularly collaborative. Only 34 articles have a single author signature and so, for example, written by only one author.

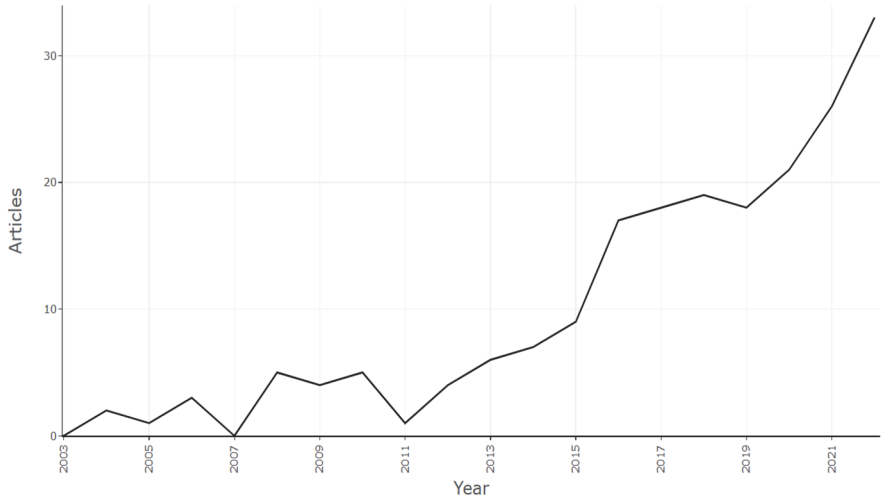
Table 2. *Main information about the data*

Description	Results
MAIN INFORMATION ABOUT DATA	
Timespan	1997:2022
Sources (Journals, Books, etc)	100
Documents	204
Annual Growth Rate %	11,87
Document Average Age	5,95
Average citations per doc	32,61
References	1
DOCUMENT CONTENTS	
Keywords Plus (ID)	1221
Author's Keywords (DE)	804
AUTHORS	
Authors	626
Authors of single-authored docs	33
AUTHORS COLLABORATION	
Single-authored docs	34
Co-Authors per Doc	3,25
International co-authorships %	31,37
DOCUMENT TYPES	
article	188
review	16

Source: Author's elaboration

Simultaneously, as shown in Figure 2, researchers' interest in the subject has grown. Throughout the period from 2003 to 2011, 30 articles were published. In the following period, starting from 2011 to 2019, it is possible to observe a consolidation in publications. Finally, the line graph demonstrates a significant increase in publications, which have risen from 18 to 33 between 2019 and 2022. This trend reveals the actuality of the research topic. This is also explained by the increased publication of practical reports and supranational decisions addressing and boosting corporate social responsibility practices. (European Union, 2023).

Figure 2. *Annual scientific production*



Source: Author's elaboration suing Bibliometrix

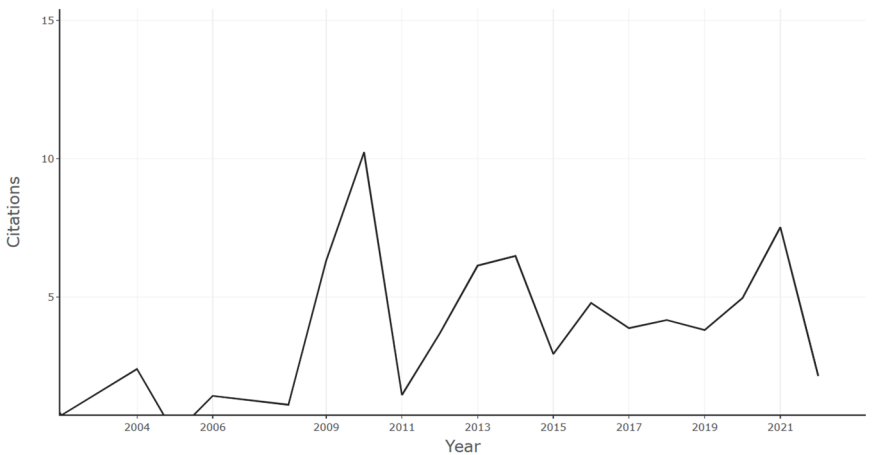
Considering the average quotations received by the 204 documents analysed between the period from 2002 to 2022, some interesting results emerge (Figure 3). Firstly, there is a considerable fluctuation in the number of citations per year, especially from 2002 to 2015. The trend is extremely variable; during this period, the course of citations reached 10.2 in 2010. The researcher's citation fluctuation partly reflects the observed publication modifications until 2013. From 2015 onwards, the number of citations partially stabilised by maintaining a constant trend with no more drastic ups and downs. However, the trend reached its second high of 7.5 in 2021, plunging the following year dramatically.

The following Table 3 shows that the ten most frequently cited articles were written throughout the period from 1997 to 2016. Thus, the most cited paper has 777 citations, with an average of about 29 total citations per year, representing a milestone within this field of research. The most cited work is that of Edvinsson (1997), which focuses on Intellectual Capital as neither 'human capital' nor 'structural capital' are represented in traditional accounting systems even though it is a renewable, as well as renewing resource that must be cultivated in a context. Schneider *et al.* (2010) discuss sustainable degrowth, defined as equitable downscaling of production and consumption that increases human well-being and enhances ecological conditions at the local and global level in the short and long term. In the literature is also widely

agreed that new tools are required to foster democracy and to focus on the sustainability arena for illustrative purposes (Brown, 2009). One of these tools is integrated reporting which enables an open dialogue between individuals and groups capable of assisting or obstructing efforts to foster sustainable business practices (Brown & Dillard, 2014). In the same line of research is also the contribution of Calabrese *et al.* (2016). Sun *et al.* (2021) investigate the impact of environmental subsidies on environmental innovation, showing that they do not significantly impact environmental technology innovation. Considering bioplastic production, Campo Iles & Martin (2013) illustrate how business models can link producers and customers by developing new technologies and products. Additionally, Bonilla *et al.* (2010) analyze the role of cleaner production in the sustainable development of modern societies. Considering water footprinting and mining, Northey *et al.* (2016) demonstrate that opportunities exist for technology assessment and improving industry reporting. At the same time, the research findings of Moran *et al.* (2014) correspond to similar lines of research.

The results obtained referring to the map of geographical collaboration among the authors of the paper under consideration (Figure 4) and the corresponding explanatory table (Table 4) are particularly interesting. As shown, the authors' most significant collaboration occurs between China and USA, followed by Australia and New Zealand. Collaborations between China and Italy rank third and are immediately succeeded by China with Japan.

Figure 3. *Annual scientific production*



Source: Author's elaboration suing Bibliometrix

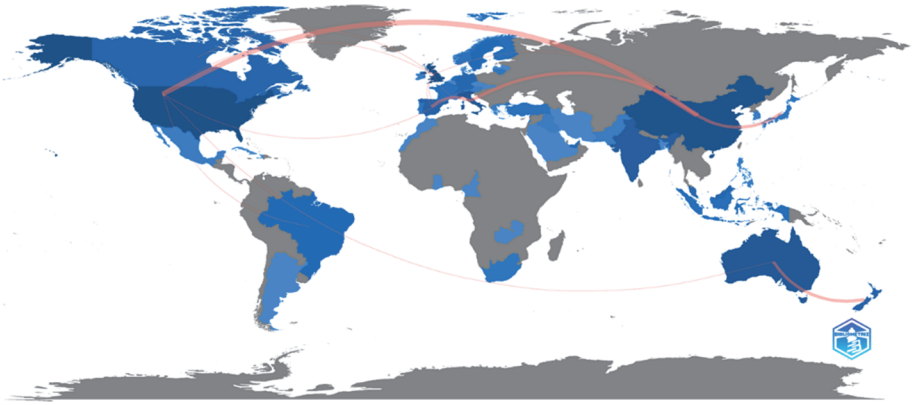
Table 3. *Most global cited documents*

Paper	Total citations	Total citations per year
(Edvinsson, 1997)	777	28,78
(Schneider *et al.*, 2010)	565	40,36
(Brown, 2009)	281	18,73
(Brown & Dillard, 2014)	233	23,30
(Sun *et al.*, 2021)	197	65,67
(Iles & Martin, 2013)	164	14,91
(Calabrese *et al.*, 2016)	115	14,38
(Bonilla *et al.*, 2010)	113	8,07
Northey *et al.* (2016)	109	13,63
(Moran *et al.*, 2014)	96	9,60

Source: Author's elaboration

Several factors can explain these results. First, research institutes and universities in the USA promote major collaborations between American and foreign researchers, both within and outside their institutions (Gazni *et al.*, 2012). Thus, China, which attributes great relevance to collaborations with foreign countries and within its own country, is attracted to these cooperation opportunities. On the other hand, the collaboration between Australia and New Zealand could be explained by their geographical vicinity and the importance that these two countries attribute to the need to adopt new ESG compliance policies supported by new emerging technologies. Hence between Australian and New Zealand co-authorship among individual researchers, a collaboration between institutions and international collaboration are very common (Benckendorff, 2010). The study also shows that China is a recurring country in terms of most important collaborations among international researchers and has strong connections, especially with some of the G7 countries, particularly Italy, just followed by Japan (He, 2009).

Figure 4. *Countries' collaboration world map*



Source: Author's elaboration using Bibliometrix

Table 4. *Most important collaborations among international authors*

From	To	Frequency
China	USA	5
Australia	New Zealand	3
China	Italy	3
China	Japan	3
Italy	Spain	3
China	United Kingdom	2
United Kingdom	Canada	2
United Kingdom	France	2
United Kingdom	Ireland	2
United Kingdom	Italy	2

Source: Author's elaboration

3.1. Source and keywords analysis

The number of publications related to this subject in international journals represents an important indicator for researchers and authors (Dumay & Cai, 2014). Table 5 shows the analysis of international journals' main sources and publishing interests. As illustrated, the Journal of Cleaner Production is the leading source in this research field, having published nearly 74 articles on the subject. This journal focuses on cleaner production, environmental and sustainability research, and practice, trying to help societies become more sustainable. In second place is situated Technological Forecasting and Social

Change journal, with seven articles published. This represents a key source for all those who want to deal with the methodology and practice of technological forecasting and future studies as planning tools interrelate social, environmental, and technological factors. The third place, with five articles' publications, is held by Accounting, Auditing and Accountability Journal, followed by Business Strategy and the Environment, which has four related publications.

As can be observed from Figure 5, sources' production is grown over time. The growth has started to rise since the early 2000s; previously, there were no publications of articles in this field of research. Journal of Cleaner Production confirms its relevance to this subject area, showing a substantial increase in articles and publications motivating a burgeoning interest in this topic. All the other journals, such as Technological Forecasting and Social Change, Accounting, Auditing and Accountability Journal and Business Strategy and the Environment, have experienced a slightly increasing trend.

Table 5. *Most relevant sources*

Sources	Articles
Journal of Cleaner Production	74
Technological Forecasting and Social Change	7
Accounting, Auditing and Accountability Journal	5
Business Strategy and the Environment	4
Critical Perspectives on Accounting	3
Social Responsibility Journal	3
Sustainability Accounting, Management and Policy Journal	3
Accounting and Finance	2
Accounting Education	2
Accounting Forum	2

Source: Author's elaboration

Figure 6 identifies the most frequent keywords that authors believe best represent the content of their paper and their recurring presence in titles, abstracts and keywords used in this research area. The first place is held by the keyword "sustainable development". That occurs because the term "sustainable development" is closely related to the core issue of the study and embodies all the other words contained in the search string. In second place is the keyword "climate change". Despite the search string used in this study considering different kinds of keywords (Massaro *et al.*, 2021), "climate change" is one of the most relevant occurrences and is linked to a unique stream of literature with increasing transversal connections between

research topics. Reference is made, for example, to global warming, greenhouse gases, carbon emissions and earth pollution.

Figure 7 provides another interesting perspective on the keywords' usage. The following thematic map illustrates the evolution of research topics through two variables, on the horizontal axis, the centrality of the research topics (relevance degree) and the vertical axis, the density of their discussion (development degree) (Noyons, 2001).

The map represents different topics organised in four thematic clusters. The lower right-hand side displays some topics, such as sustainable development, decision making and economics, which remain stable over time. At the bottom of the opposite side, we find some emerging relevant research themes, like carbon emissions and mapping. The top right side of the figure contains driving themes, meaning that they have contributed to the growth of this research field, for instance, climate change, life cycle, public policy and sustainability reporting. Lastly, positioned at the centre of the upper part of the map are all those topics that can be considered partly niche arguments but also search drivers, for example, innovation and international trade and some aspects that can be found within the construction industry.

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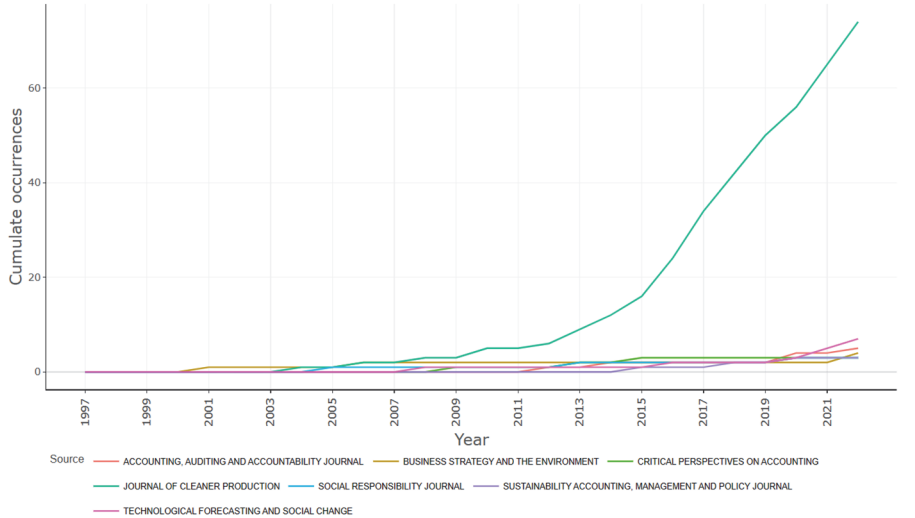
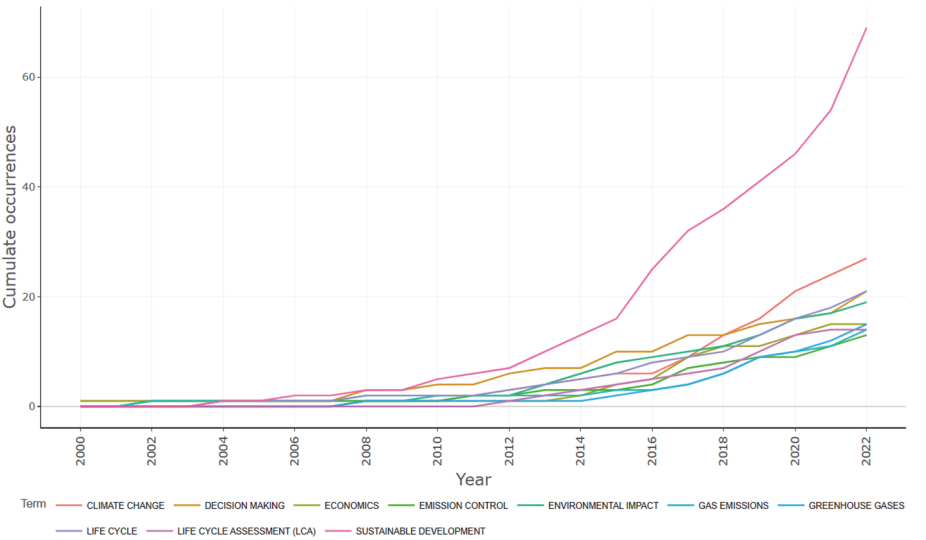
Additionally, to enforce and address RQ2, the next Figure 8 shows the topic dendrogram. The diagram shows the hierarchical relationships between the keywords used in the titles and abstracts by authors ((Aria & Cuccurullo, 2017; Secundo *et al.*, 2020). Considering this representation, obtaining an interpretation and identification of clusters is simpler through a cut of the figure and vertical lines. The figure doesn't represent the perfect level of associations between clusters (Andrews, 2003), but it tries to estimate the approximate number of clusters to enable the discussion of research results. In the conceptual structure map (Figure 9), our study identifies three main research clusters: (1) new emissions control technologies (red area), (2) new sustainability assessment management technologies (blue area), and (3) disruptive energy management technologies (green area).

Figure 5. Sources' production over time



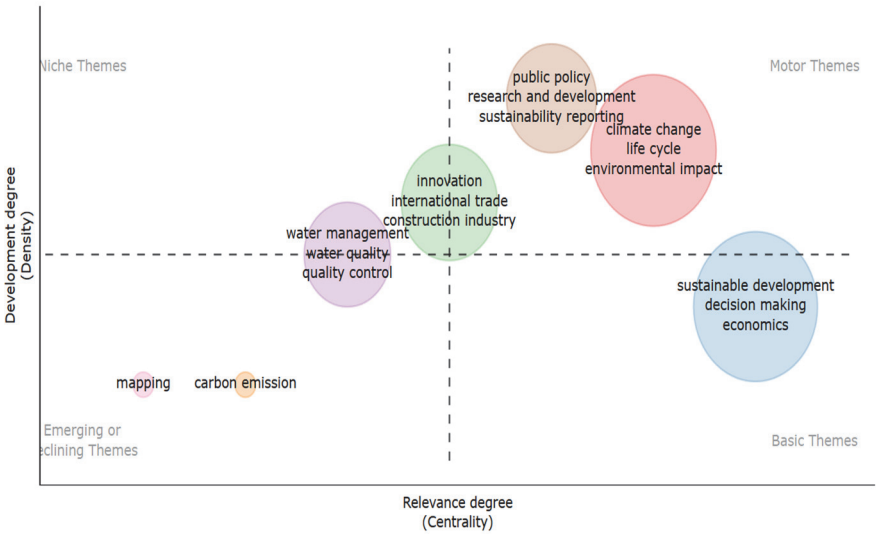
Source: Author's elaboration using Bibliometrix

Figure 6. *Words' frequency over time*



Source: Author's elaboration using Bibliometrix

Figure 7. *Thematic Map*



Source: Author's elaboration using Bibliometrix

3.1.1. New emissions control technologies

The red area focuses on new technologies adopted in emissions control. Indeed, modern technologies are able to check carbon dioxide emissions and result in less use of conventional forms of energy, contributing to greater environmental quality (Zhao *et al.*, 2021). All of these international commitments and countries' efforts have accelerated the introduction of new technologies to achieve rapid and cost-effective emission reduction goals (Lu *et al.*, 2022). It is already known that both governments and private actors are collaborating to relocate investments towards areas with low-carbon technologies (Tao *et al.*, 2022). The most prominent technology under discussion refers to Artificial Intelligence (AI) systems that are widely used in the strategic management processes related to pollutant emissions. AI is projected to be useful in future pollution control and environmental management (Hoang *et al.*, 2022). AI could potentially reduce emissions through optimisation practices (Crawford, 2021). Papers related to climate and sustainability issues demonstrate opportunities for AI to help in decreasing emissions with a focus on quantifying emission reductions. For example, Rolnick *et al.* (2019) summarise current and potential use cases of climate-related machine learning. They describe how it can be a powerful tool in reducing greenhouse gas emissions and helping society adapt to

climate change. Kell *et al.* (2020) illustrate that AI is not directly used to reduce emissions but to demonstrate the optimal low-carbon energy mix for the electricity grid. Furthermore, the analysis shows that the use of AI is particularly common in the agriculture sector because the application of this technology has been found to be the most excellent performer as far as the accuracy and robustness are concerned (Das *et al.*, 2018). This happens because agriculture is a dynamic domain where situations cannot be generalized to find a common solution. Governance frameworks that encourage transparency, accountability, and long-term thinking can support the integration of emissions control strategies into business operations. Robust governance practices ensure that organizations adhere to applicable environmental regulations and standards, minimizing the risk of non-compliance and associated penalties. Effective governance structures also promote transparency and accurate reporting of emissions data to regulatory bodies (Sarpong & Bein, 2020).

3.1.2. New sustainability assessment management technologies

The second strand of literature (blue area) results are linked to technological innovation that can assist sustainability assessment. New technologies can provide the advantage of economic growth and societal benefits and minimize the negative effects on the natural environment by improving, for example, more efficient use of resources and less environmental exploitation. With figure 9, we discover the feasibility of blockchain technology as an infrastructure to improve sustainability assessment management, providing all the information needed for better decision-making in different settings, for instance, in product design, waste treatment, water management and commerce. Over the past few years, numerous studies on blockchain and its applicability have been published. Some of them studied the connection of blockchain applicability with the Internet of Things (IoT) (Conoscenti *et al.*, 2016). Other studies analysed blockchain solutions with big data (Karafiloski & Mishev, 2017). Blockchain technology can be used as a tool to guarantee a secure and reliable decentralized information system to catch and spread all fundamental data that are required to create different sustainability assessment models (Shojaei *et al.*, 2019). The combined use of new emerging technologies also benefits the supply chain side, showing enormous potential for addressing information needs and decreasing sustainability-related uncertainty (Busse *et al.*, 2017). In addition, according to Burkhardt *et al.* (2019), blockchain enables permanent, immutable, and transparent record-keeping of transactions in decentralized systems (Burkhardt

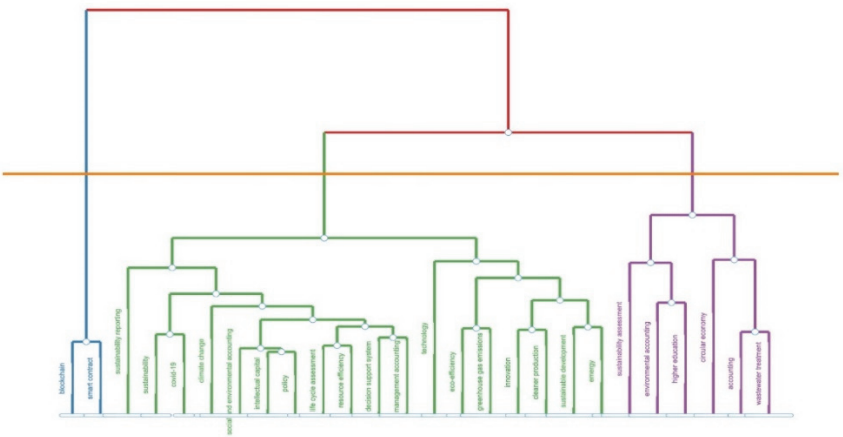
et al., 2019). The blockchain-based system provides financial management for waste collection, aiming at better health and socio-environmental education and people's financial and social inclusion. The (re)cycling of materials within the municipality assists in decreasing the pressure on the environment (MacArthur Foundation, 2019), and the recycled solid waste can be transformed into raw materials for different production chains, contributing to achieving the Sustainable Development Goals (SDGs) set by The Agenda 2030. The governance aspect of ESG involves the establishment of policies, frameworks, and decision-making processes to guide the adoption and implementation of new technologies for sustainability assessment. This includes considerations such as stakeholder engagement, risk assessment, and compliance with regulatory and ethical standards. Effective governance ensures that the adoption of new technologies aligns with the organization's sustainability goals and values (Lin & Qamruzzaman, 2023). New technologies, such as blockchain, Information Technology (IT) and IoT, generate vast amounts of data that are critical for sustainability assessment. Furthermore, it is demonstrated that IT governance frameworks may contribute to the general the implementation of the principles of the good corporate governance (Juiz *et al.*, 2014). Governance frameworks should address data governance issues, including data privacy, security, ownership, and access rights. Robust data governance practices help ensure the integrity, reliability, and ethical use of data in sustainability assessment processes.

3.1.3. Disruptive energy management technologies

The last green cluster deals with new technologies for disruptive energy management. Technological development has long been a key tool in Campo's energy management system (Sagar & Holdren, 2002). Large amounts of data are increasingly accumulated in the energy sector with the continuous application of wireless transmission and cloud computing technologies (Groschopf *et al.*, 2021). For this reason, emerging technologies now play a major role in facing challenges related to the energy system. Digital technologies offer numerous opportunities for improving the construction industry throughout the entire construction life cycle and significant benefits such as cost reductions, production efficiency, improved quality, and speed (Setaki & van Timmeren, 2022). Nowadays, we have access to a wide range of engineering technologies dedicated to increasing electrical energy efficiency. It is important to consider that targeted investments in energy efficiency have the potential to mitigate tensions

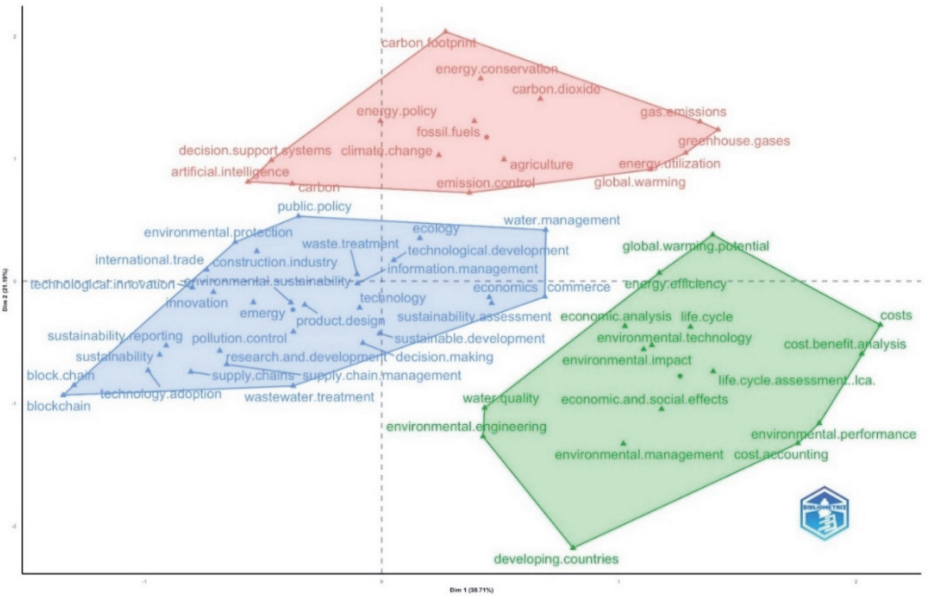
between economic growth objectives and sustainable development commitments (Fowlie & Meeks, 2021). Digital technologies are becoming increasingly important for creating more effective energy efficiency management. Using such new technologies, governments can create data-driven insights into their energy usage and identify areas of improvement (Khaleel *et al.*, 2023). As Saxena *et al.* (2023) suggest, new technologies can help make energy data more accurate and precise by avoiding distortions and facilitating the narrative of non-financial accounting. Regarding good governance practices, they can ensure the efficient and sustainable management of energy resources, improve compliance with environmental regulations, promote fair competition, and protect stakeholders' interests, including consumers and the environment. With the increasing use of digital technologies and data-driven insights in energy management, governance frameworks are needed to address energy data (Yahya & Rafiq, 2020). Effective governance of energy data ensures that data is collected, managed, and utilized responsibly and ethically while also protecting the rights and interests of individuals and organizations.

Figure 8. *Topic dendrogram*



Source: Author's elaboration using Bibliometrix

Figure 9. *Conceptual Structure Map*



Source: Author's elaboration using Bibliometrix

4. Theoretical and practical implications

The study identifies several theoretical and practical implications to provide an orientation to a more sustainable approach for academics and practitioners.

4.1 Theoretical implications

Regarding theoretical implications, this paper extends the results of previous studies that focused on the two areas of new technologies and ESG criteria separately instead of combining them. Indeed, the main objective of this paper is to present and discuss the latest research findings and novelties in emerging technologies focused on ESG compliance. The paper highlights the need for an integrated framework considering the interdependencies and relationships between emerging technologies and ESG aspects. This integration can enhance our understanding of how technological advancements can be leveraged to address environmental, social, and governance challenges.

The theoretical implications of this analysis include deepening our understanding of how technological innovation can act as an enabler for sustainable development, offering insights into the dynamics between innovation, sustainability, and societal well-being.

4.2. Practical implications

Several practical implications were identified, allowing managers and chief technology officers (CTOs) to understand the current connections between technological innovations and economic, social, and environmental aspects within the literature and to visualise new technological frontiers. Another ambitious goal that we sought to pursue was to provide a clear vision of what technologies could be used by companies operating in the various sectors to act sustainably. For example, as shown by Das *et al.* (2018), in the agriculture sector widely use Artificial Intelligence techniques for ESG management and reporting. Gradually very complex problems are being solved with the development of various AI systems able to find specific solutions for each problem.

França *et al.* (2020) show that Blockchain technology is growing worldwide, given its structural characteristics aimed at security and information integrity, without a central management system. Hence, Blockchain should significantly contribute to increasing the quality of life in the typical ESG aspect, such as education, health, environment, social inclusion, and local economy. Moreover, new engineering practices have the potential to guarantee an improved energy-efficient system and to reduce products' life cycle costs (Fowlie & Meeks, 2021).

5. Discussion and Conclusion

This section aims to discuss the main findings and conclude the present paper by providing insights, critiques and theoretical and practical implications from the research stream investigated.

The literature review has shown a need for more specific studies highlighting the link between new emerging technologies and the environmental, social and governance criteria. According to Massaro, Dumay, *et al.* (2016) and Paul & Criado (2020), an article based on SRL methodology intends to increase knowledge on a given topic and show future research paths. Thus, our study's main objective is to analyse the role of the new technologies for ESG purposes.

Using a bibliometric analysis, this study aims to decrease bias and increase the research's reliability and rigour by using an objective point of view on the subject matter (Zupic & Čater, 2015). Furthermore, the method adopted in the paper is based on five crucial steps, and a keywords analysis was conducted to select all relevant papers related to the topic.

Analysing the 204 papers selected to conduct this study, we found that the most related articles were published by the Journal of Cleaner Production and these amount to 74 articles, followed by the seven publications in the Technological Forecasting and Social Change and the five publications in the Accounting, Auditing and Accountability Journal. Additionally, the most frequently cited paper is that of Edvinsson (1997), which has 777 citations.

Referring to the geographical distribution of publications, it turned out that the most significant collaborations occurred between China and USA, followed just after the cooperation between Australia and New Zealand.

Another interesting finding emerged from the analysis of publication trends over the years in which we found that, between 2003 and 2011, the flow of scientific publications rose and fell steadily; starting from 2011 onwards, the trend has grown significantly to the present day. Therefore, this result demonstrates an increasing interest of researchers in the subject matter.

The study also includes a keywords analysis that revealed the most frequently used and searched words corresponding to "sustainable development", followed by "climate change". Additionally, through this specific analysis, we identified three main areas of interest related to the topic: new technologies for emissions control, new technologies for sustainability assessment management and new technologies for disruptive energy management. Analysing these three active research streams, we obtained some interesting results; for example, Artificial Intelligence (AI) technology is commonly used to control and strategically manage pollutant emissions. Another important finding is the discovery that blockchain technology is considered an important tool in managing sustainability assessment within companies. Lastly, the study shows that energy efficiency can better balance economic growth and sustainable development.

The study contributes to the state of the field in various ways and frames possible directions for future research but has limitations due to the field's novelty.

The study's limitations are due to the topic's novelty, but it is becoming extremely relevant in recent years. The first limitation can be found in using only the Scopus database to perform a bibliometric analysis of the literature. Secondly, the method adopted relies on the analysis of the keyword to obtain significant results, which may limit the full understanding of the topic and its knowledge. Furthermore, the research considers only peer-reviewed

articles and reviews written in English before 2023 selected within the business, management, and accounting areas. Simultaneously, scholars may consider this study a valuable resource for understanding this research field's state of the art and identifying future analyses.

Finally, the paper proposes future research directions for academia and industry to develop and implement sustainable solutions and increase their compliance with ESG criteria. It would be useful if future studies better emphasise the similarities and differences between practitioners' and scholars' points of view, also using another database to conduct the analysis; this would help capture a broader range of literature and provide a more extensive understanding of the topic. It would also be relevant to conduct comparative analyses between different countries to examine the interpretation of this specific research topic in each area, and to explore the cultural, economic, and regulatory factors that influence the adoption and effectiveness of these technologies in different areas. Future investigations might also consider a wider range of subject areas to include more sectors and research fields in the analysis; this could involve examining the role of new technologies in ESG management across sectors such as healthcare, transportation, and manufacturing, as well as incorporating research fields like environmental science and social sciences. Furthermore, while the current study primarily utilizes quantitative bibliometric analysis, future research can incorporate qualitative research methods to gain a deeper understanding of the perceptions, motivations, and challenges related to adopting and implementing new technologies in ESG management. This could involve interviews, case studies, and surveys with industry practitioners, policymakers, and other relevant stakeholders.

To conclude, it would be particularly interesting if future research would monitor and measure the improvement in the long-term performance of those companies adopting new technologies that enable them to comply with ESG criteria.

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Workplace Inclusivity from a Strategy-as-Practice Perspective: A Systematic Literature Review

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Abstract

Inclusive work environments are more likely to attract and retain a diverse talent pool, improving business outcomes and competitive advantage. However, inclusivity has been treated as a sum of organizational behaviour norms elaborated by savvy organizations. In line with real-world practices, we advance that inclusivity is a strategic practice that emerges as an inter-related and co-evolving pool of influences from the individual, firm, and environment, elevating it as a strategic management topic. We implemented a systematic literature review (SLR) of selected contributions dealing with the role of workplace inclusivity. Collected papers have been analysed by considering the so-called strategy-as-practice (s-as-p) perspective (i.e., the doing of strategy, who does it, what they do, how they do it, what they use, and what implications this has for shaping strategy), hence, enriching strategy theory, empirical research, and real-world practice. We offer a typology of strategic inclusivity practices that scholars and practitioners can use to study workplace inclusivity strategically. The proposed typology identifies the different domains of inclusivity by considering the level of praxis and practitioners. This article is the first to provide an in-depth and broad review of inclusivity in the workplace via a strategic management lens.

Keywords: Workplace inclusivity; Strategy-as-Practice; Systematic Literature Review

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Sommario

Gli ambienti di lavoro inclusivi hanno maggiori probabilità di attrarre e trattenere talenti, migliorando i risultati aziendali e il vantaggio competitivo. Tuttavia, l'inclusività è stata spesso trattata, dalla letteratura scientifica e dalla pratica aziendale, come una somma di norme di comportamento organizzativo. In linea con le pratiche del mondo reale, in questo articolo avanziamo che l'inclusività è da intendersi, invece, come una pratica strategica. Quest'ultima emerge dall'interconnessione e co-evoluzione di influenze tra l'individuo, l'azienda e l'ambiente, elevando il concetto di inclusività ad argomento di gestione strategica. In questo articolo forniamo una revisione sistematica della letteratura di contributi scientifici che trattano il ruolo dell'inclusività sul posto di lavoro. I lavori raccolti sono stati analizzati considerando la prospettiva strategy-as-practice. Offriamo una concettualizzazione di pratiche di inclusività strategica che studiosi e professionisti possono utilizzare per studiare strategicamente l'inclusività sul posto di lavoro. Questo articolo è il primo a fornire una revisione approfondita e ampia dell'inclusività sul posto di lavoro attraverso una lente di gestione strategica.

Parole chiave: inclusività, posto di lavoro, strategia, management strategico, co-evoluzione

1. Introduction

Workplace inclusivity has gained significant attention in recent years in organizational studies. It generally refers to "involv[ing] equal opportunity for members of socially marginalized groups to participate and contribute while concurrently providing opportunities for members of non-marginalized groups, and to support employees in their efforts to be fully engaged at all levels of the organization and to be authentically themselves" (Shore *et al*., 2018, p. 177). In this regard, scholars have pointed out that such practice should not only focus on the representation of diverse groups but also on creating an environment that allows all employees to feel valued and included (e.g., providing training and resources to managers to help them understand and address their own biases, promoting open communication and feedback) (Shore *et al*., 2018; Santoro *et al*., 2020; Glowka *et al*, 2022). Hence, it is worth noting that workplace inclusivity holds ethical and moral significance and carries strategic implications.

Organizations can integrate workplace inclusivity into their strategic goals and objectives to enhance performance and competitiveness. In fact, inclusive organizations are more likely to attract and retain a diverse pool of talent, stimulate innovation, creativity, and problem-solving processes, as well as enhance strategic decision-making at large (Oshiotse and Oleary, 2007; Vohra *et al*., 2015; Metz *et al*., 2022). Consequently, the effects linked to workplace inclusivity can be investigated through a strategy-as-

practice (s-as-p) perspective, which delves into the practical aspects of strategy implementation, including the actors involved, their actions, the tools they utilize, and the resulting implications for shaping superior strategy (Jarzabkowski and Spee, 2009). Thus, bringing valuable insights for business and management knowledge.

However, despite a growing body of research and attention on the workplace inclusivity topic, its outcomes in the context of firms' strategic management have either received no attention. To fill this void, we assessed the state-of-the-art knowledge, spotted limitations and provided a research agenda by answering the following research question: *May workplace inclusivity be reframed as a strategic practice?*

To answer this research question, a comprehensive Systematic Literature Review (SLR) was conducted, analysing a total of 32 articles published in English in peer-reviewed journals.

Specifically, to provide an examination of inclusivity according to a (s-as-p) perspective, the SLR has been conducted by analyzing articles via a multilevel view: i) *micro*, those papers that explore and attempt to explain strategy at levels of the individual or group's experience of a specific episode (e.g., a decision); ii) *meso*, those contributions that explore and attempt to explain strategy at the organizational or sub-organizational level (e.g., a change program, or a strategy process), and iii) *macro*, those articles studies that explore and attempt to explain strategy at the institutional level, within a specific industry. Additionally, articles have been analysed by looking to identify i) the role of practitioners as individuals or aggregate actors (e.g., top management), and ii) whether the practitioner is inside the organization (i.e., line or staff role within the organization's structure and governance arrangements) or outside the organization – in line with Jarzabkowski and Spee (2009). This methodological choice falls into what discussed by behavioral strategists (e.g., Powell *et al*., 2011; Cristofaro, 2022; Cristofaro and Lovallo, 2022): understanding how individual cognition scales to collective behavior in organizations. In fact, from a behavioral strategy standpoint it will be possible to understand how individuals guide organizational policies for inclusivity and analyze how industry norms and regulations impact workplace inclusivity.

This multilevel analysis's findings contribute to theory and practice in several ways. First, from the SLR, it appeared that workplace inclusivity is a multidimensional concept that requires a comprehensive approach to tackle it both from theoretical and practical points of view. Second, practitioners can learn the importance of integrating inclusivity into their organizations' strategic architecture at *micro* (where individual values, beliefs, and behaviors play a crucial role in creating an inclusive work

environment), *meso* (where organizations must adopt inclusive policies, practices, and foster a sense of belonging, supporting diverse perspectives), and *macro* (where societal norms, cultural values, and legal frameworks collectively influence the overall workplace inclusivity) levels, thereby enhancing performance and competitiveness. Third, scholars gain insights into the strategy-as-practice perspective and its application to workplace inclusivity from a behavioral strategy standpoint, opening avenues for further research in workplace inclusivity within strategic management. Fourth, this SLR's findings could be beneficial to spur policymakers enhancing the promotion of laws and regulations towards a wider adoption of workplace inclusivity policies within organizations.

Overall, this SLR emphasizes the importance of elevating workplace inclusivity as a needed strategic management practice (Barile *et al*., 2022), and sees it as an inter-related and co-evolving pool of influences from the individual, firm, and environment (e.g., Paniccia and Leoni, 2019; Abatecola and Cristofaro, 2020; Abatecola *et al*., 2020) that, if not done, will remain confined as a sum of organizational behaviour norms adopted by savvy organizations.

2. Theoretical premises

2.1 Workplace inclusivity

In organizational environments characterized by high levels of workplace diversity, workplace inclusivity represents at the same time, both the prerequisite as well as the desired end (Brown, 2002; Douglas, 2008). Over the years, many scholars have been interested in investigating how organizations manage inclusivity; in this regard, Brendel *et al*. (2022) observed that management inclusivity research can be approached from three paradigms: i) technical inclusion, ii) organic inclusion, and iii) integrated inclusion research.

Whereas technical inclusion research focuses on quantitative attributes of inclusivity that contribute towards the betterment of an already diverse organization (Cucari *et al*., 2018; Brendel *et al*., 2022), Andrew and Ashworth (2022) highlighted the benefits of technical inclusion in their study of the relationship between representation and inclusion within public organizations. Particularly, these authors, by using statistical methods, discovered a positive correlation between organizational representation and employee and organizational performance. More specifically, in the case of public service organizations, the statistical results suggested "that

representative public service organizations are more likely to produce improved policy outcomes for citizens in general" (p. 285).

In contrast, organic inclusion research prioritises qualitative attributes of a diverse workforce, such as workers' psychological and emotional experiences of belonging (Brendel *et al*., 2022). The qualitative case study accomplished by Lirio *et al*. (2008) explored the inclusive role of the manager in supporting reduced-load arrangements; these authors highlighted that key managerial psychological and emotional behaviours, such as developing identifying and empathizing with the employees led to more workplace inclusivity and more excellent organizational performance. This aligns with Yu and Lee (2022) definition of inclusion "as a set of behaviours (culture) that encourage employees to feel valued for their unique qualities and experience a sense of belonging" (p. 4).

However, in favour of the previously mentioned paradigms, Brendel *et al*. (2022) recommend a more comprehensive approach in integrated, inclusive research that considers both perspectives. In fact, integrated inclusion research holistically merges technical and organic inclusion streams to achieve a more comprehensive understanding of creating a truly inclusive workplace. By merging these two streams, researchers can better understand how formal policies and practices interact with cultural norms and values to create an inclusive workplace. This approach can help organizations identify gaps in their current diversity and inclusion efforts and develop more effective strategies to address them. Ultimately, integrated inclusion research can help organizations to create a more inclusive culture that values diversity and supports the success of all employees.

As previously outlined the initial assumption in facilitating inclusivity is that diversity already exists within an organization (Brown, 2002; Douglas, 2008). Where this assumption stands, studies on the barriers to workplace inclusion are harmonized in line with the perspective of the inclusivity topical area that the study addresses, whether it be inclusive organizational cultures, inclusive leadership approaches and inclusive organizational practices (Shore *et al*., 2018; Brendel *et al*., 2022). And as such, barriers to inclusivity can be categorized into: i) inclusive practices (i.e., relating to a combination of barriers depending on if it is the praxis, practitioner, or actionable practices under focus), ii) inclusive organizational cultural barriers (i.e., relating to macro and sectorial level barriers), and iii) inclusive leadership (i.e., relating to firm level and individual behavioural barriers) (Oshiotse and Oleary, 2007; Cummings and Daellenbach, 2009; Shore *et al*., 2018; Metz *et al*., 2022).

2.2. Strategy-as-practice

Initially, a challenge associated with the concept of 'strategy-as-practice' research was the tension between the academic discipline and the applied discipline of s-as-p and other management studies (Chia, 2004). That gap between the two where "strategy-in-practice answers to a different logic of engagement from that that the academic world is most comfortable with: a practical logic that, while internally coherent and plausible to the world of practitioners, is often misrepresented and force-fitted into an academic logic of rationality that requires practice to speak itself in a language foreign to its application" (Chia, 2004, p. 33). More recently, s-as-p research has expanded the scope of study to include research parameters that attempt to consider practical logic (Jarzabkowski and Spee, 2009). In particular, the s-as-p field has defined its broad research parameters as studying: i) practitioners (i.e., those people who do the work of strategy), ii) practices (i.e., the social, symbolic, and material tools through which strategy work is done), and iii) praxis (i.e., the flow of activity in which strategy is accomplished) (Jarzabkowski 2005; Whittington, 2006; Johnson *et al*. 2007).

Each of the three topical areas of the s-as-p study contributes to further strategic management studies in distinct ways. Vaara and Whittington (2012), in their review of s-as-p practices research, noted the attributes of strategic practice being that they are complex, flexible, polyvalent, and adaptive to their social environment. Resulting in the conclusion that s-as-p serves not only decision-making but also "to include and exclude, legitimate and delegitimate, and even, potentially, to change the very concept of the organization itself" (p. 14). Although s-as-p praxis studies allow for more empirical research within the field as they can focus on the micro-level specifics, including behaviours, actions, skillsets, and resources, those micro-level specifics are still influenced by macro-institutional and societal organizational aspects (Vaara and Whittington, 2012). Regarding s-as-p practitioners' studies, Vaara and Whittington (2012) noted that the practitioner's identity plays a role in the delivery of their strategic actions, and the social factors that inform the practitioner's identity also inform their strategic actions. Furthermore, this acknowledgment and understanding of the role that trends and shifts in social, societal, and macro-institutional practices play in s-as-p help to bridge the initial gap in s-as-p research between static academic discipline and fluctuating applied discipline.

3. Methodology

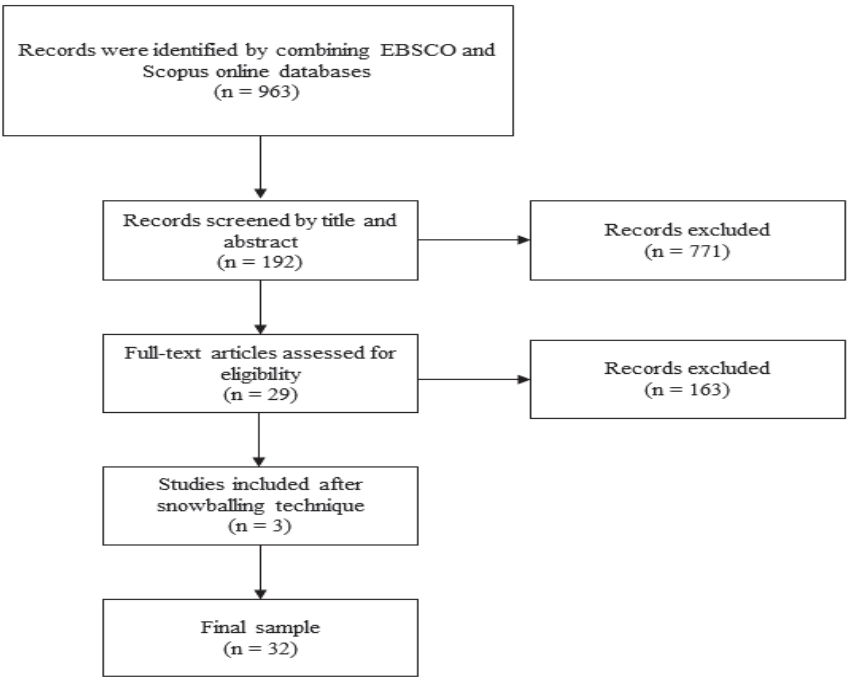
3.1 Data collection

Research into workplace inclusivity can be categorized as mature since empirical contributions flourished and other reviews have been published (e.g., Stevens *et al*., 2008; Shore *et al*., 2018). Furthermore, subsequent studies have tended to "draw from the literature to argue the need for a new study and to develop the logic underlying the hypotheses they will test" (Edmondson and Mcmanus, 2007, p. 1159). According to this life cycle stage, we propose a Systematic Literature Review (SLR) to address the aim of this work. The choice to embrace this methodology is in line with Tranfield *et al*. (2003), who have highlighted the two distinctive traits of any SLR: i) it employs a scientific data selection process, and ii) it helps to link future and past research.

1. Specifically, by following the best practices adopted in recent contributions that used a similar process (e.g., Cristofaro *et al*., 2022), a selection of scientific articles has been accomplished, as illustrated in Figure 1. In particular:
   In this study, we have retrieved articles by combining the results produced on Business Source Premier (EBSCO) and Scopus databases;
2. The search for articles has not been limited by any temporal exclusion criteria (last update December 2022). Nevertheless, we considered only peer-reviewed journal articles published in English;
3. Selected papers had to contain one or more of the keywords used in the search to guarantee the paper's substantive relevance of contributions to the theme (e.g., Cristofaro, 2022). As a result, the following three keywords were selected 'inclusiv*,' 'involv*,' 'integrat*';
4. Then, a second string has been implemented to align with the business side of the research (Cristofaro, 2019): 'organization*' OR 'compan*' OR 'manag*' OR 'corporat*' OR 'firm*' OR 'business*' OR 'enterprise*' OR 'venture*.' 963 articles have been retrieved;
5. The resulting abstracts of the 963 articles were scanned to ensure their suitability for the SLR. This step in the selection process helps to ensure that the substantive context of the papers, are in coherence with the research question and aim of the review. The scan produced 192 results.
6. Authors individually scanned the 192 remaining articles to detect if such contributions dealt directly or indirectly with workplace inclusivity, inclusion, involvement, and integration topics; in case of discordance, authors discussed to reach a consensus. Lastly, only 29 results remained, and to ensure additional rigor, a snowballing technique has been

implemented and three contributions were added within the final sample (32 contributions in total).

Figure 1 - Flowchart of papers' collection strategy



3.2 Data analysis

To systematically analyze the 32 selected articles, we adopted a two-step procedure. First, following the s-as-p analysis of Jarzabkowski and Spee (2009), we identified practitioners in terms of what unit of analysis the authors regard as a strategy practitioner and the location of that strategy practitioner about organizational boundaries: i) whether the practitioner is an individual or an aggregate actor (e.g., top management), and ii) whether the practitioner is inside the organization (i.e., line or staff role within the organization's structure and governance arrangements) or outside the organization.

Second, to have an exhaustive understanding of organisational inclusivity as an s-as-p approach, it appeared to be necessary the investigation of such phenomena on three distinct, but intertwined levels of analysis – in line with Jarzabkowski and Spee (2009). Following these latter scholars, we define

praxis as a stream of activity that interconnects the micro actions of individuals and groups with the wider institutions in which those actions are located and to which they contribute; they suggested that this definition helps link the macro and the micro in s-as-p research. Accordingly, we distinguished three levels within the literature: i) *micro*, thus studies that explore and attempt to explain strategy praxis at levels of the individual or group's experience of a specific episode (e.g., a decision); ii) *meso*, thus studies that explore and attempt to explain strategy praxis at the organizational or sub-organizational level (e.g., a change program, or a strategy process), and iii) *macro*, thus studies that explore and attempt to explain strategy praxis at the institutional level, within a specific industry.

As a result of this analysis, we came out with a typology of strategic inclusivity practices by defining three sub-sequential domains for each of the three topical aspects (see Table 1):

- Domains A, B and C are comprised of studies examining the practitioner as an individual organisational actor, although each domain had a different focus level. Domain A focuses on the macro level, Domain B focuses on the meso level, and Domain C concentrate on the micro level;
- Domains D, E and F contained those studies that examined the practitioner as an aggregate organizational actor. Where Domain F focussed on a macro level, Domain E on a meso level, and Domain D on a micro level;
- Lastly, Domains G, H, and I were formed by research with a focus on extra organizational practitioners, who act on a macro, meso, and micro level, respectively.

Notably, Domain F contained the most empirical (N=3; 9%) and theoretical studies (N=10; 31%), whereas Domains G and H did not contain any studies at all. In general, most studies focussed on the macro level of praxis (N=13; 41%). With Domain, the aggregate actor at a macro level emerged as the most popular research domain containing 13 articles. Whereas, at the same praxis level, only two contributions each comprised the domains where the individual and the extra organizational actor were the focus. More detailed information for each domain is provided in the following subsections.

3.3 Descriptive statistics

Among the 32 articles included in the qualitative synthesis, the majority were studies that focused on Inclusive Leadership (N = 12; 38%), followed by Inclusive Practices (N=9; 28%), and Inclusive Culture (N = 8; 25%). Notably, within the dataset, Brown's earliest synthesized paper focused on inclusive leadership and was published in 2002. This shows the relevance

of this stream of research; despite being a relatively novel topic, it has received quite a satisfactory level of attention from scholars worldwide.

Table 1 - A typology of strategic inclusivity practices

		Type of Practitioner		
		Individual actors within the organization	*Aggregate actors within the organization*	*Extra organization*
Level of Praxis	*Micro*	**A** Empirical = 1 Theoretical = 3	**D** Empirical = 0 Theoretical = 3	**G** Empirical = 0 Theoretical = 0
	Meso	**B** Empirical = 1 Theoretical = 2	**E** Empirical = 0 Theoretical = 5	**H** Empirical = 0 Theoretical = 0
	Macro	**C** Empirical = 1 Theoretical = 1	**F** Empirical = 3 Theoretical = 10	**I** Empirical = 1 Theoretical = 1

Furthermore, concerning the three distinct but interrelated main topical aspects of workplace inclusivity, among the papers belonging to the *inclusive culture* cluster, 50% are conceptual, and the other 50% are equally split among quantitative and qualitative papers. Regarding *inclusive leadership*, 75% of the documents are conceptual frameworks, case studies, or empirical qualitative papers, while 16% are SLR, and only 8% used the mixed methods approach. About the *inclusive practices*, 50% are conceptual frameworks; in this case, the other 50% of the articles are equally split among quantitative and qualitative contributions. Remarkably, those scholars who have been focussed on more than one topical aspect have produced conceptual contributions.

4. Inclusivity from a s-as-p point of view

By the means of a SLR, which allowed us to rigorously analyze the 32 articles collected, we adopt a multilevel perspective of how inclusivity enhances firms' performances as well as how inclusivity can be successfully implemented by relying on the concept of strategy-as-practice. In doing so, we shed light on the role that employees and managers have at the micro, meso, and macro level. Particularly, inclusivity is a complex and multi-dimensional concept requiring a multi-level approach (as illustrated in Figure 2). At the micro level, creating a culture of inclusivity requires promoting individual-level factors such as personal values and beliefs (Coscia, 2022). At the meso level, organizations must focus on leadership practices, team

dynamics, and organizational policies to create an inclusive work environment. Finally, at the macro level, policies and norms play a significant role in shaping inclusivity in the workplace. More information about the dynamics of each level are disclosed in the following sub-sections.

4.1 Strategic inclusivity: A micro-level perspective

Research into Micro praxis emphasizes the crucial role of employee identity and belonging in amplifying corporate performance and sustainable competitive advantage. Inclusive practices are identified as a catalyst for efficiently achieving organizational strategic objectives at a micro level (Douglas, 2008; Jarzabkowski and Spee, 2009; Mària and Lozano, 2010; van Rooji, 2012; Adams *et al*., 2020).

Among these, inclusive leadership reinforces employee identity and feelings of belonging, consequently influencing job performance outcomes. As aggregate actors, inclusive leaders utilize instruments like affinity groups and demographic-specific workplace programs to advance s-as-p at a micro level. Such tools legitimize recognition of employee cultural and demographic identities, fostering organizational efficiency and performance by enhancing feelings of belonging, thus moderating job satisfaction (Douglas, 2008; Jarzabkowski and Spee, 2009; van Rooji, 2012; Alang *et al*., 2022). Every study in this domain identified 'standpoint plurality' as key for inclusion, alongside values and skills. Douglas (2008) found that affinity groups give diverse employees a sense of belonging, increasing job satisfaction, retention, and overall performance. van Rooij (2012) similarly noted performance gains when older workers engaged in age-inclusive talent management strategies.

Also, inclusive leadership approaches significantly affect micro-level employee behaviours (Mària and Lozano, 2010), with clear correlations to employee well-being and performance (Adams *et al*., 2020).

This domain probes the impact of inclusive leadership on implementing inclusive social expectations and policies, shaping the inclusive organizational culture, and fulfilling strategic goals (Vohra *et al*., 2015; Moore *et al*., 2017). Particularly, Alang *et al*. (2022) observed that in public organizations where indigenous people are marginalized, inclusive leadership enhances strategic performance by improving employee perceptions of inclusion. Upon recognizing themselves as "esteemed members of the work group", these employees can enhance their voice, job satisfaction, and individual performance, contributing to overall firm performance.

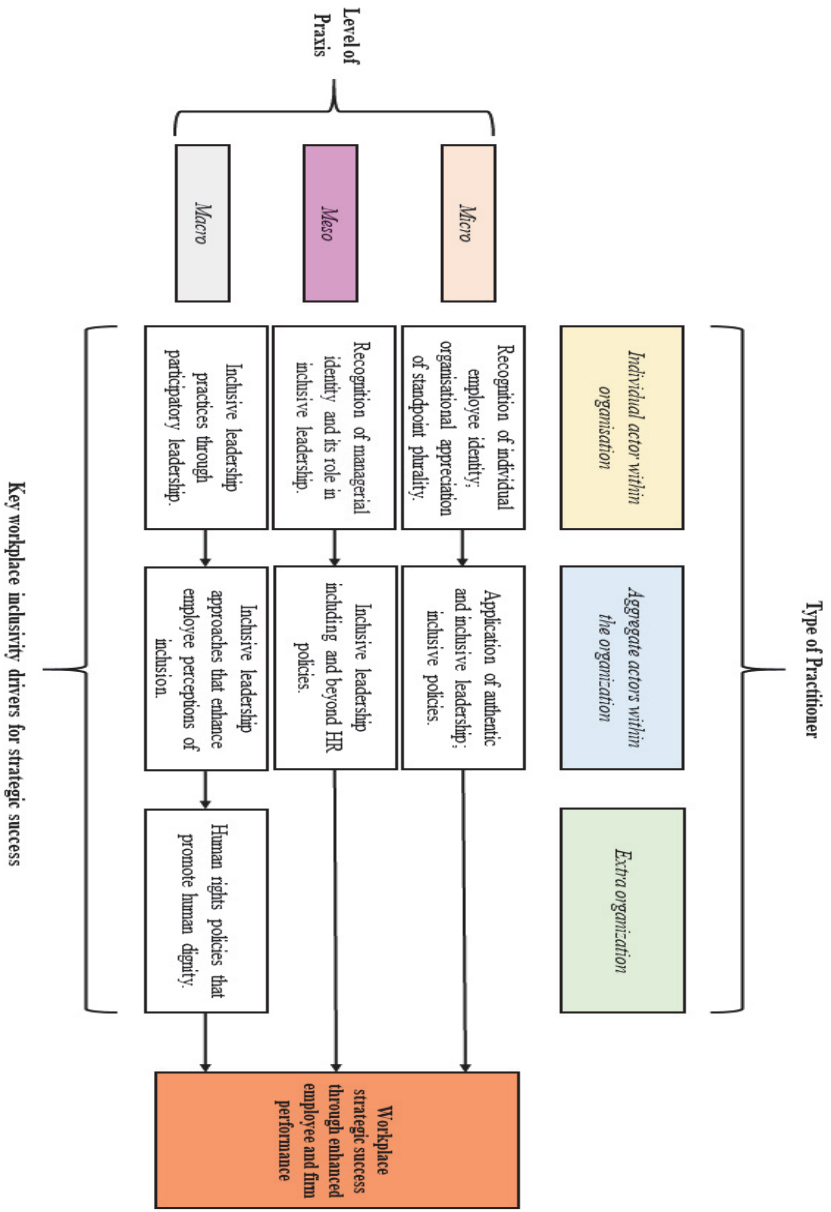


Figure 2 - Inclusivity from a s-as-p point of view

4.2 Strategic inclusivity: A meso-level perspective

At the Meso praxis level, achieving inclusion relies on effective management of employee membership in formalized institutional subgroups, representing their social and organizational identity structures (Metz *et al*., 2022). This indicates that strategic inclusive practices hinge on the successful implementation of micro-level inclusive strategic practices (Jarzabkowski and Spee, 2009). Inclusive leaders' key role involves operating both as individual and aggregate actors.

Specifically, as individual actors, inclusive leaders' success is tied to their strong sense of belonging towards coworkers and the broader organization (Lirio *et al*., 2008; Yu and Lee, 2020; Metz *et al*., 2022). Conversely, as aggregate actors, they can devise and enforce rewarding policies fostering an inclusive culture, thereby improving strategic performance via organizational standpoint plurality, employee satisfaction, retention, and commitment (Allison *et al*., 2004; Pless and Maak, 2004; Ryan and Kossek, 2008; Boekhorst, 2015; Dobusch, 2021).

As per Jarzabkowski and Spee (2009), this domain shares theoretical lenses with Domain A regarding identity, cognition, and discourse analysis. Metz *et al.* (2022) observed a correlation between an individual's inclusion or exclusion feelings and their identification with multiple organizational subgroups. Lirio *et al*. (2008) and Yu and Lee (2020) affirmed this observation, extending it to encompass the relationship between managerial identity and inclusive leadership. They demonstrated how culture impacts not only individuals but also entire organizational subgroups. Specifically, Yu and Lee (2020) underscored the effect of male managers on female employees' experiences and performance. This domain's studies elucidate the interplay between social and human capital, its impact on individual experiences and opportunity access, and its effect on commitment, performance, and organizational strategic objectives.

Ryan and Kossek (2008) identified inclusive HR practices' role in establishing an inclusive organizational culture and achieving strategic goals. They proposed three considerations for fostering inclusivity, leading to improved work-life balance, employee satisfaction, job retention, and commitment. Other scholars (Allison *et al*., 2004; Boekhorst, 2015; Dobusch, 2021; Pless and Maak, 2004) emphasized inclusive leadership's significance beyond HR policies in promoting organizational strategy via standpoint plurality.

4.3 Strategic inclusivity: A macro-level perspective

The Macro praxis level, unlike previous levels, affects policies and structures below it while building upon them. Organizational leadership at this level, through their inclusive, participatory leadership, generates strategic benefits for their firms (Jarzabkowski and Spee, 2009; Kuknor and Bhattacharya, 2021; Ke *et al*., 2022; Korkmaz *et al*., 2022). These practices bolster inclusive cultures that affirm employee identity and belonging, enhancing performance. Furthermore, external actors, such as labor unions, influence firms' strategic performance by supporting policies that elevate human dignity (Kalfagianni and Pattberg, 2013; Hahn, 2022).

According to Jarzabkowski and Spee (2009), studies in this domain examine institutional, market, or industry praxis from individuals' actions and interactions. For instance, Meng and Neill (2021) linked inclusive leadership practices through participatory leadership to industry-level strategic performance. Similarly, Bortree and Waters (2014) found that inclusive practices, like inclusive communication, enhance employee retention. These studies underscore the link between inclusive leadership, employee empowerment, and strategic performance.

This domain explores the relationship between aggregate practitioners and macro-praxis concerning institutions, industries, or sectors (Jarzabkowski and Spee, 2009). Both Brown (2002) and Ke *et al*. (2022) observed inclusivity's differential experience based on individual factors and organization size, while highlighting inclusive leadership's positive impact on performance. Kuknor and Bhattacharya (2021) emphasized inclusive policies' varied impact on individuals. Other papers emphasize authentic and inclusive leadership's role in achieving strategic goals and enhancing firm performance (Korkmaz *et al*., 2022).

The domain also investigates the influence of external stakeholders, such as institutions, on organizational strategic practice (Jarzabkowski and Spee, 2009). Hahn (2022) discussed human rights policies' role in organizational strategy, stating reduced human dignity due to poverty affects strategic employee and societal development. Similarly, Kalfagianni and Pattberg (2013) observed that industry standards impact organizational inclusion levels and industry-specific strategic goals.

5. Research Agenda

In this study, the authors performed a SLR of papers about workplace inclusivity using the strategy-as-practice perspective. This approach allowed us to contribute to the research area by answering the research question*: May workplace inclusivity be reframed as a strategic practice?* To understand how the strategy-as-practice perspective can provide a typology for inclusivity as a strategic practice; and identify inclusivity as a strategic practice.

This work – by translating under a strategic management perspective what has been for an extended period mainly an organizational behaviour topic – proposes an understanding of the relationship between inclusive practices and strategy-as-practice aimed at enhancing firms' performance and their sustainable competitive advantage.

Specifically, this SLR is aimed to fill four voids in the literature: i) the call for future research, posed by Ryan and Kossek (2008), about understanding the role that inclusion plays in mediating the relationship between job commitment, job satisfaction and firm performance, ii) the need to provide an understanding of inclusive workplace culture as an instrument that supports employee fulfilment and performance, and which is also directly linked to strategic firm outcomes (Yu and Lee, 2022), iii) a better understanding of how inclusive leadership, as a strategic tool, is determined by the leader's experience and identity, and how, in turn, it influences employee experience, identity, and job outcomes (Korkmaz *et al*., 2022), and iv) understanding how individual cognition about workplace inclusivity scales to collective behavior, and vice versa, in organizations.

In doing so, this study sheds light on the role that employees and managers have at the micro, meso, and macro level. Particularly, the findings of this SLR – including the proposed framework – highlight the importance, for both scholars and practitioners, to adopt a holistic approach while either studying or promoting workplace inclusivity.

Future research in the field of inclusive practices and strategy-as-practice can build upon the findings of this study and explore several avenues. The following 10 area provide recommendations for future research:

1. Investigate the moderating role of contextual factors: Future research should examine how contextual factors, such as organizational culture, industry characteristics, and national culture, moderate the relationship between inclusive practices and firm performance. Understanding these moderating effects can provide a nuanced understanding of the complex

dynamics at play and help identify contextual factors that enhance or hinder the effectiveness of inclusive practices.

2. Examine the role of inclusive practices in diverse organizational contexts: While this study focuses on the relationship between inclusive practices and firm performance, future research can explore the role of inclusivity in different types of organizations, such as startups, non-profit organizations, and multinational corporations. Examining how inclusive practices manifest and impact performance in diverse organizational contexts can contribute to a more comprehensive understanding of the subject.
3. Explore the longitudinal effects of inclusive practices: This study primarily focuses on the immediate and short-term effects of inclusive practices on firm performance. Future research can adopt longitudinal research designs to investigate the long-term effects of inclusive practices on various outcomes, such as innovation, employee retention, and organizational resilience. Longitudinal studies can shed light on the sustainability and enduring impact of inclusive practices over time.
4. Investigate the role of technology in promoting workplace inclusivity: With the increasing reliance on technology in the workplace, future research can explore how digital platforms, AI-driven systems, and virtual collaboration tools can be leveraged to promote inclusivity. Understanding how technology can be harnessed to create inclusive work environments can provide insights into innovative practices and interventions that organizations can adopt.
5. Examine the intersectionality of identities in relation to inclusive practices: This study emphasizes the importance of leaders' experiences and identities in shaping inclusive leadership. Future research can delve deeper into the concept of intersectionality, considering how different dimensions of diversity (e.g., race, gender, age, and disability) intersect and influence employees' experiences of inclusivity. This research can offer a more nuanced understanding of the complexities involved in creating inclusive workplaces.
6. Explore the impact of inclusive practices on external stakeholders: future research can investigate the effects of inclusive practices on external stakeholders, such as customers, clients, and suppliers. Examining the link between inclusive practices and external stakeholder perceptions, satisfaction, and loyalty can provide insights into the broader societal impact of organizational inclusivity.
7. Conduct comparative studies across different industries and regions: This study contributes to understanding inclusive practices from a

strategic management perspective. Future research can extend this understanding by conducting comparative studies across different industries and regions. Such studies can identify industry-specific challenges and opportunities for promoting inclusivity and shed light on the role of contextual factors in shaping inclusive practices.

8. Examine the role of leadership development programs in fostering inclusive practices: Future research can investigate the effectiveness of leadership development programs in enhancing leaders' competencies and behaviors related to inclusivity. By examining the impact of such programs on leader effectiveness, employee experiences, and organizational outcomes, researchers can provide evidence-based recommendations for designing and implementing leadership development initiatives focused on inclusivity.
9. Explore the role of inclusive practices in crisis situations: Organizations face unique challenges in maintaining inclusivity in times of crisis, such as natural disasters or pandemics. Future research can examine how inclusive practices contribute to organizational resilience and employee well-being during crises. Understanding the role of inclusivity in crisis management can inform strategies and interventions that support employees and maintain a culture of inclusivity under challenging circumstances.
10. Investigate the role of metrics and measurement in assessing inclusive practices: Future research can explore the development and application of metrics and measurement tools to assess the effectiveness of inclusive practices. By establishing robust measurement.

In conclusion, future research in the field of inclusive practices and strategy-as-practice holds great potential for advancing our understanding of the relationship between inclusion, firm performance, and sustainable competitive advantage. By addressing the outlined research gaps, scholars can contribute to developing evidence-based strategies for promoting workplace inclusivity and creating more equitable organizations. Ultimately, this research can drive positive change at the micro, meso, and macro levels, fostering a more inclusive and prosperous future for organizations and their stakeholders.

6. Implications for Practice, Limitations, and Remarks

For what concerns the practitioners, the present study suggests the following: a) Aligning inclusivity with strategic objectives, b) Incorporating

inclusivity in strategic planning, c) Developing inclusive leadership capabilities, d) Integrate inclusivity into performance management systems, e) Foster cross-functional collaboration for inclusivity, and f) Embed inclusivity in talent management processes.

Aligning inclusivity with strategic objectives: Practitioners should recognize that inclusivity is not just an HR initiative but a strategic practice that aligns with broader organizational objectives. By integrating inclusivity into the organization's strategic goals and vision, leaders can ensure that diversity and inclusion efforts are prioritized and embedded throughout the organization. This alignment enables organizations to leverage the benefits of diversity and inclusivity to drive innovation, improve decision-making, and enhance overall performance.

Incorporating inclusivity in strategic planning: Inclusive practices should be integrated into the organization's strategic planning processes. This involves considering diversity and inclusion as critical factors when formulating strategies, setting goals, and allocating resources. By proactively addressing inclusivity at the strategic planning stage, organizations can develop a comprehensive roadmap for creating an inclusive culture and leveraging diversity as a competitive advantage.

Developing inclusive leadership capabilities: Practitioners should focus on developing the leadership capabilities necessary to drive inclusivity as a strategic practice. This involves providing leadership development programs that equip managers with the skills to lead diverse teams effectively, foster an inclusive climate, and navigate the complexities of diverse perspectives. Developing inclusive leaders at all levels of the organization ensures that inclusivity is practiced throughout and enables the alignment of strategic objectives with inclusive behaviors.

Integrate inclusivity into performance management systems: Inclusivity should be integrated into performance management systems to ensure that progress towards inclusivity goals is measured and rewarded. This includes incorporating diversity and inclusion metrics into performance evaluations, providing feedback on inclusive behaviors, and recognizing and rewarding individuals and teams that actively contribute to creating an inclusive work environment. By linking inclusivity to performance management, organizations send a clear message about the importance of inclusivity and provide incentives for employees to actively engage in inclusive practices.

Foster cross-functional collaboration for inclusivity: Inclusivity as a strategic practice requires collaboration across different functions and departments within the organization. Practitioners should encourage and facilitate cross-functional collaboration to leverage diverse perspectives,

knowledge, and expertise. This can be achieved through initiatives such as diversity councils, task forces, and employee resource groups that bring together employees from different backgrounds and levels of the organization to collaborate on inclusive practices and initiatives.

Embed inclusivity in talent management processes: To effectively implement inclusivity as a strategic practice, practitioners should integrate inclusive principles into talent management processes. This includes inclusive recruitment and selection practices, diverse succession planning, and providing equal opportunities for career development and advancement.

In conclusion, embracing inclusivity as a strategic practice holds numerous benefits for organizations. By aligning inclusivity with strategic objectives, organizations can leverage diversity to drive innovation and enhance overall performance. Integrating inclusivity into strategic planning ensures that it becomes a priority and informs resource allocation. Developing inclusive leadership capabilities empowers managers to foster an inclusive climate and effectively lead diverse teams. Incorporating inclusivity into performance management systems promotes accountability and recognition for inclusive behaviors. Finally, fostering cross-functional collaboration and embedding inclusivity in talent management processes create a foundation for sustained organizational success and a culture of equity and inclusion.

This study is not exempted from limitations, which, however, can represent a starting point for the following studies. Notably, we point out the following: i) the keywords used for the data collection process, despite being strictly controlled may have affected the final sample selection in ways that different keywords may not have, and ii) we used Business Source Premier (EBSCO) and Scopus as databases. This data analysis limitation is based on assessment limitations stemming from the researcher's knowledge; nonetheless, the methodological steps outlined in making the selection process may have helped to reduce the effects of this limitation to only a negligible one (Cristofaro, 2019; Cristofaro, 2022). Furthermore, we also invite future scholars to look also in different sources as well as to study the domains that have received little or no attention (e.g., domains G and H in Table 1).

By filling the voids in the literature, we can expand our theoretical frameworks and deepen our understanding of inclusive leadership, workplace culture, and the collective impact of inclusivity on organizational outcomes. Our research holds the potential to shape not only academic discourse but also practical strategies for practitioners and

policymakers alike. Together, let us forge new paths, challenge existing paradigms, and pave the way for a future where inclusivity is not just an aspiration but a strategic imperative.

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Managing rural destinations in an evolving society: an empirical research♦

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Abstract

Due to the current complex socio-economic and ecological challenges, there is an urgent need in tourism literature and practice to rethink destination management models. Thus, this paper draws on the conceptualisation of the tourism destination as an ecosystem and develops a co-evolutionary destination management model that allows grasping the relationships and temporal dynamics between destination key actors. The study investigates the Castelli Romani rural destination comprised of 16 geographically proximate municipalities near Rome. Then, the proposed model is applied to this destination by mainly looking at the dynamic interplay between its key actors and underlying ecosystem evolution towards (un)sustainability. Results show the crucial role of sustainable entrepreneurship in this dynamic and the importance for destination management organisations (DMO) to involve sustainable and innovative entrepreneurs, reinforcing the entrepreneurial vision of destination development. From that, both theoretical and practical implications are derived.

Keywords: entrepreneurship; destination; co-evolution; management; ecosystem; case study.

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Sommario

A causa delle attuali complesse sfide socio-economiche ed ecologiche, vi è un urgente bisogno nella letteratura e nella pratica del turismo di ripensare i modelli di gestione delle destinazioni. Pertanto, questo articolo - attingendo dalla concettualizzazione della destinazione turistica come ecosistema - sviluppa un modello co-evolutivo di gestione della destinazione che consente di cogliere le relazioni e le dinamiche temporali tra gli attori chiave della stessa. In particolare, lo studio esamina la destinazione rurale dei Castelli Romani, vicino Roma, composta da 16 comuni. Il modello co-evolutivo proposto viene applicato a questa destinazione osservando l'interazione dinamica tra i suoi attori chiave e l'evoluzione dell'ecosistema verso la (in)sostenibilità. I risultati mostrano il ruolo cruciale dell'imprenditorialità sostenibile e l'importanza per le Destination Management Organization (DMO) di saper coinvolgere gli imprenditori sostenibili e innovativi, al fine di rafforzare la visione imprenditoriale della destinazione. Da tutto ciò emergono rilevanti implicazioni teoriche e pratiche.

Keywords: imprenditorialità; destinazione turistica; co-evoluzione; management; ecosistema; caso studio.

1. Introduction

There is an urgent need in tourism literature and practice for rethinking destination management models due to the current complex socio-economic and ecological challenges (UNWTO, 2022). In particular, as emphasised by Guerreiro (2022), what seems to be missing is a management model through which destinations can: *i)* adequately respond to the challenges in place and *ii)* play a crucial role in the recovery process of the tourism industry. In this regard, it is evident that none of the key destination actors (i.e., tourism firms, institutions, local communities, and tourists) – individually considered – can face these challenges and fill this role (Kamata, 2022; Paniccia *et al.*, 2018).

Therefore, a major need is to develop new destination management models according to holistic approaches (Fyall & Garrod, 2019) to increase knowledge and awareness of the dynamics of the relationship between these actors and how they can be appropriately managed to promote sustainability (Agapito *et al.,* 2022; Sigala, 2020).

Hence, this study aims to answer the following research questions:

RQ1: *What management model can a destination adopt to consider all its actors and foster its sustainable development holistically?*

Thus, this article aims to answer this question by adopting a co-evolutionary lens that allows grasping the relationships and temporal dynamics among destination key actors. To do so, firstly, a co-evolutionary model is developed, drawing on the conceptualisation of the tourism destination as an ecosystem. Secondly, the paper presents the Castelli Romani rural destination (located near Rome) according to key actors' stories. Then, the proposed model is applied to the destination, mainly looking at the dynamic interplay between its key actors and underlying ecosystem evolution towards (un)sustainability. Results show the crucial role of sustainable entrepreneurship in this dynamic and the importance for destination management organisation (DMO) to involve sustainable and innovative entrepreneurs, reinforcing the entrepreneurial vision of destination development.

By doing so, this paper provides interesting theoretical and practical contributions. Concerning the former, this study advances destination management studies by adopting a co-evolutionary approach (e.g., García-Cabrera *et al.,* 2016; Leoni & Cristofaro, 2021; Paniccia & Leoni, 2019). In fact, the provided co-evolutionary model contributes to the debate on destination management that calls for a more holistic and inclusive approach (e.g., Fyall & Garrod, 2019; Guerreiro, 2022), especially regarding the sustainability and competitiveness of destinations (e.g., Agapito *et al.,* 2022). Moreover, this paper expands previous co-evolutionary tourism studies (e.g., Cristofaro et al., 2020; Paniccia & Leoni, 2019) by considering multiple destination actors simultaneously; thus, confirming the co-evolutionary lens as a fruitful approach for holistically and dynamically studying relationships in the tourism field. Lastly, the results of this research furtherly emphasise the crucial role sustainable entrepreneurs play in destination development (e.g., Sørensen & Grindsted, 2021), proposing that their practices – when mindful of environmental and social concerns alongside economic ones – can foster ecosystems' sustainability (Agapito et al., 2022).

Concerning the *practical implications*, the provided co-evolutionary destination management model suggests tourism entrepreneurs and policymakers to *i)* enhance local sub-systems identities; *ii)* innovate the tourism offering through start-ups and digitalisation; *iii)* identify specific tourist targets; and, *iv)* invest in advanced training courses.

2. Tourism destination as a co-evolutionary ecosystem

Over the last decade, the need to manage destinations holistically, considering key relationships among numerous actors at multiple levels, has

been increasingly acknowledged (e.g., Hillebrand, 2022). Paniccia and Baiocco (2020) emphasise that such interplay can be better understood in the context of complex adaptive *ecosystems*. In fact, every tourism destination is made by a plurality of local sub-systems, each characterised by its specific interacting factors and relations of power and proximity. Conceived in this way, tourism destination needs to be wisely managed (Buhalis & Cooper, 2022) to effectively integrate the various resources, services, and stakeholders and create a seamless tourist customer experience with positive effects on sustainability (Fyall & Garrod, 2019), especially in the current post-pandemic contest (e.g., Li et al., 2022).

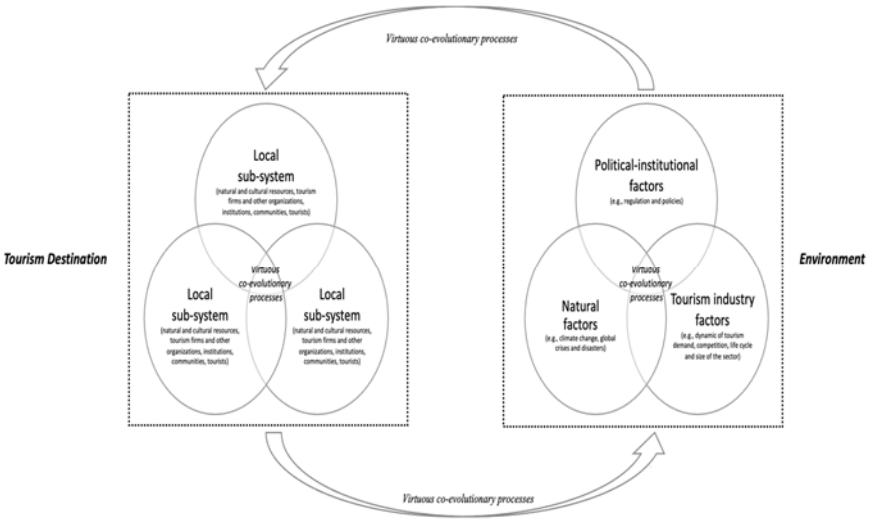
In this regard, as emphasized by Guerreiro (2022), tourism destinations are called – now as never before – to reconsider their current management model considering the dynamics of the relationship between the different actors (i.e., multistakeholder) at different levels (i.e., multilevel) within the destination and how they can progress toward sustainability (Sigala, 2020).

To do so, the co-evolutionary approach seems appropriate for holistically exploring the complex and dynamic relationships within the destination (i.e., ecosystem) and its external environment. Co-evolution, in fact, has made its way into tourism studies of the last decade as a useful lens to explain the interdependencies between destinations and their external environment and their temporal dynamics (Paniccia & Baiocco, 2020; Paniccia & Leoni, 2019). In other words, the co-evolutionary perspective constitutes a suitable interpretative lens for an exhaustive and balanced analysis of the complex dynamics connected to the multidimensionality of the tourism phenomenon, favouring the overcoming of partial analyses focused either on organisations or their environments, observed as separate units of analysis. In fact, it stimulates systemic, circular, and dialectical thinking in the interpretation of phenomena and the continuous adaptation of organisations to their environments (Abatecola et al., 2020; Esposito De Falco, 2023). Therefore, it responds well to the need to rethink the traditional tourism destinations management models in a holistic view. According to the co-evolutionary perspective, there is a circular relationship between tourism destination key actors (i.e., tourism firms, institutions, local communities, and tourists) that co-define the tourist offering, emphasising the identity of the places, and ameliorating the quality of life (Bramwell et al., 2017).

Following this reasoning, this study proposes a co-evolutionary destination management model able to grasp the relationship and the temporal dynamics between destination key actors (see Figure 1). According to Figure 1, in a tourism destination – conceived as an ecosystem – there are various local sub-systems, each characterized by different interacting factors: natural and cultural resources, tourism firms and other organizations,

institutions, communities, and tourists (Paniccia & Baiocco, 2020). These factors, together with all the local sub-systems and the destination, constitute the micro, meso, and macro spatial-organizational levels on which to focus the analysis of key relationships. In fact, the dynamics of interactions and mutual feedback between these three levels drive the development of (un)sustainable tourism paths within the destination.

Figure 1 - The co-evolutionary destination management model



Source 1: own elaboration.

By doing so, co-evolutionary processes – hopefully virtuous – occur among the three levels, determining their co-evolution. This interdependence and reciprocal functionality require mutual adaptation, expressed according to an evolutionary circular relationship of a dialectical nature, with systemic influences (Norgaard, 1994). Furthermore, the destination co-evolves with the larger natural and socio-economic system (i.e., the environment). When this relationship is positive, it leads to the co-determination of sustainability-oriented practices and policies, with inevitable implications for the development of sustainable tourism paths and, therefore, for the competitiveness of both destination and the natural and socio-economic system.

Moreover, as already demonstrated by previous studies (e.g., Cristofaro et al., 2020; Paniccia & Leoni, 2019), the virtuous co-evolutionary processes take place according to specific determinants, which are: *a) tourist experience*, understood as the ability to interpret social evolutions and to

grasp their emerging values, as well as to critically evaluate, in a holistic key, possible repercussions on the relationship between tourists and local communities (Prebensen & Foss, 2011); *b) systemic approach*, understood as the ability to organize and manage the different actors and the system of complex interactions within a destination (Cafferata, 2016); *c) multistakeholder decision-making processes*, based on public-private cooperation and aimed at integrating different points of view in joint strategies perceived as crucial for the success of all the actors involved (Beritelli, 2011); *d) inter-organizational knowledge transfer processes*, based on the sharing of knowledge, ethical and moral values on a local scale (Paniccia et al., 2018); and, *e) social responsibility*, understood as a tourism firms and destinations attention to emerging values from contexts in evolution and in line with the community concept (Brouder & Fullerton, 2015).

According to the above, tourism destinations' sustainable development and competitiveness depend on the implementation of a co-evolutionary destination management model capable of activating synergies between a multiplicity of actors and taking into consideration the dynamics of the interdependencies between natural and cultural resources specific to the different local sub-system included in the destination.

3. Methodology

To successfully reach the paper's aim, an exploratory case study has been developed (Cucari *et al.*, 2020). This methodology is mainly used when researchers seek an in-depth understanding of causal and complex mechanisms within a particular case (Yin, 2018). In this vein, the Castelli Romani destination[1] has been chosen as unit of analysis. In particular, from a methodological point of view, the choice of the Castelli Romani as a single case was driven by the aim to find a representative tourism destination characterised by the presence of multiple local sub-systems, each with its specificities. Moreover, its destination management model has undergone profound changes (and is still changing) over the last decade, making it an interesting case to verify if and how the co-evolutionary model proposed by this study can support the destination toward sustainable development and competitiveness. Lastly, the empirical analysis focused on the Castelli

[1] The Castelli Romani destination is located a few kilometres southeasts of Rome and comprises the following 16 municipalities (i.e., local sub-systems): 1. Albano Laziale, 2. Ariccia, 3. Castel Gandolfo, 4. Colonna, 5. Frascati, 6. Genzano di Roma, 7. Grottaferrata, 8. Lanuvio, 9. Lariano, 10. Marino, 11. Monte Compatri, 12. Monte Porzio Catone, 13. Nemi, 14. Rocca di Papa, 15. Rocca Priora, and 16. Velletri.

Romani also due to the close physical distance between the research area and the authors, which allowed for more precise data collection, enhancing the results' reliability and validity.

The Castelli Romani case has been investigated through semi-structured interviews, involving private and public stakeholders from the destination's different municipalities (i.e., local sub-systems). In particular, 27 interviews were carried out over 15 months between January 2022 and March 2023: 12 interviews with local tourism firms, 3 interviews with local policymakers, 4 interviews with the local DMO, 5 interviews with residents, and 3 with tourists.

Interviews were conducted both in person and online, using mobile phones or laptops to record them. The recorded interviews were transcribed and translated from Italian to English; in Table 1 the key details for each individual interview are reported.

Table 1 – Interviews details

N. of interview	Type of Informant	Type of Interview	Interview duration
1	Local tourism firm	In person	1h 31m
2	Local tourism firm	In person	58m
3	Local tourism firm	In person	1h 16m
4	Local tourism firm	Online	49m
5	Local tourism firm	Online	1h 26m
6	Local tourism firm	In person	1h 12m
7	Local tourism firm	In person	1h 37m
8	Local tourism firm	In person	1h 30m
9	Local tourism firm	In person	1h 31m
10	Local tourism firm	Online	1h 21m
11	Local tourism firm	Online	1h 34m
12	Local tourism firm	In person	1h 4m
13	Local policymaker	In person	1h 25m
14	Local policymaker	In person	37m
15	Local policymaker	Online	1h 30m
16	Local DMO	In person	52m
17	Local DMO	Online	1h 35m
18	Local DMO	Online	56m
19	Local DMO	Online	34m
20	Resident	In person	1h 53m
21	Resident	In person	57m
22	Resident	Online	38m
23	Resident	In person	52m
24	Resident	In person	27m
25	Tourist	In person	48m
26	Tourist	In person	1h 00m
27	Tourist	In person	57m

Source 1: own elaboration.

The interviewees were asked to explain the changes that occurred over time in the destination by describing – from their point of view – the roles played, and responsibilities taken by different stakeholders in terms of destination evolution towards (un)sustainability. Additionally, the interviewees were asked to provide an evaluation of the existence of cooperation strategies to understand if and how multistakeholder and multilevel virtuous co-evolutionary processes are in place within the destination.

Interviews have been analysed through an inductive thematic analysis, which allows coding the patterned meanings across the various interviews to identify main themes (Braun *et al.*, 2016). In other words, inductive thematic analysis does not stem from theory but is grounded in the empirical data acquired by researchers. So, in this paper, inductive thematic analysis has been used to see what themes emerge from the conducted interviews.

Two authors coded the interviews independently, and then they met to discuss the overarching themes across all coded interviews and to resolve any discrepancies between identified themes.

Furthermore, to strengthen the confidence in and the validity of the case study findings, the results emerging from the inductive thematic analysis were triangulated with data from the following sources: *i)* historical documents, *ii)* information from the DMO website, and *iii)* information from other local, regional, and national websites (e.g., Istat, Lazio Region, local associations).

4. Findings

In line with the proposed model, findings show the relationships and temporal dynamics between natural and cultural resources, tourism firms, institutions, communities, and tourists of the Castelli Romani destination. Findings have been categorized into three sub-paragraphs, namely: *i)* the importance of natural and cultural resources, *ii)* the role played by tourism firms and local institutions, and *iii)* barriers to virtuous co-evolutionary processes.

4.1 The importance of natural and cultural resources

The Castelli Romani area has always attracted some form of tourism, since ancient Roman times, due to its position particularly close to Rome, its favourable climate, and its many natural and scenic beauties. Over the

Renaissance, popes, ecclesiastical dignitaries, and the most influential Roman families spent their time in the area for their summer stay and built monumental villas on ancient ruins and abbeys, sanctuaries, and fountains of considerable artistic value. According to historical documents, in the eighteenth century, the very wealthy gentlemen, intellectuals, and artists and the sons of the English, German and French aristocrats were sent for an educational trip to Italy (the so-called Grand Tour), of which the Castelli Romani became a fundamental destination.

Direct expression of the natural and cultural heritage of the destination are also the numerous typical local products and related festivals and events organized in the different municipalities. All this contributes not only to attract tourists but also to strengthening a sense of community among the inhabitants. In fact, the first forms of aggregation and collaboration were born – as the interviews testify – precisely to protect and simultaneously make known the typical local products.

According to the above, the Castelli Romani represents a rural destination potentially able to offer various tourist experiences satisfying a multiplicity of tourist segments.

«Here we have always welcomed some form of tourism. When I was young, in the 1980s, VIPs from the world of cinema came here, like Sofia Loren, Anita Ekberg, Anthony Quinn, Michael Ende, Cary Grant and Audrey Hepburn. Their presence was a source of pride for us and pushed many to visit our municipalities and their beauties» [Inhabitant]

Despite its rich natural and cultural heritage and proximity to Rome, the Castelli Romani destination attracts limited tourism flows. According to Istat (2022a), pre-Covid-19 tourist arrivals (i.e., 2019) accounted for 1% of the total arrivals in the region and 1.3% of those in Rome. Interestingly, these percentages increased in 2020 during the pandemic period to 1.4% and 2.1%, respectively (although obviously, the values in absolute terms have drastically reduced). The general inability of the Castelli Romani destination to attract (numerous) tourists is something that even Goethe noticed – in a letter from Velletri municipality, in 1787, he wrote '*It is certainly inexplicable that these treasures should be within so short a distance of Rome, and yet not be more frequently visited; but perhaps the difficulty and inconvenience of getting to these regions, and the attraction of the magic circle of Rome, may serve to excuse the fact*'. Nowadays, this inability seems to be attributable to three main causes: 1) initiatives in the tourism field are numerous but fragmented, 2) the heritage is little known outside the destination boundaries, and 3) it presents several barriers to accessibility.

4.2 The role played by tourism firms and local institutions

The destination's rich heritage has always represented an opportunity for firms, especially those in the tourism sector. To date, there are 2,353 firms related to the tourism sector and its supply chain (Istat, 2022a). Interestingly, in most cases, firms such as restaurants and hotels have been opened inside pre-existing historic buildings to enhance that cultural heritage. Other firms have instead exploited and enhanced the natural heritage and, in fact, over the years, the number of accommodation establishments excluding hotels (e.g., agritourism and B&Bs) grew by 91%, from 163 in 2014 to 311 in 2021 (Istat, 2022a).

Moreover, several interviewees highlighted the crucial role played by local entrepreneurs in the sustainable and innovative use of the destination's resources. In fact, to adequately address the current complex socio-economic and ecological challenges, some tourism firms have started rethinking their role and services more innovatively and sustainably. In innovative terms, many restaurants, hotels, and agritourism have introduced new e-commerce services to sell ready meals and organic products. In other cases, more flexible booking (e.g., self-check-in and check-out) and long-stay offerings for remote working have been implemented. In addition, virtual experiences – such as online wine-tasting sessions and cooking classes – have been proposed. In sustainable terms, much more attention has been paid to practices (e.g., e-mountain bikes for rental and the adoption of renewable sources) that provide socio-economic and ecological benefits not only for local entrepreneurs but also residents and tourists.

Among the various virtuous initiatives, it is worth mentioning that one historic villa in the area, which has been home to a hotel for years, has revised its business model by adding agritourism and holiday house accommodation offerings and by hosting a hotel management school, a humanities-focused high school, and a kindergarten.

«We reorganize our hotel thanks to the adoption of new digital technologies that allow us to provide our guests with digital key-rooms» [Hotel owner]

The crucial role of local entrepreneurs also emerges through the numerous associations (e.g., Castelli Romani hospitality Association, Winemakers Association in Grottaferrata, Association of the New Castelli Romani) born on their initiative and scattered throughout the destination. The main aims of these associations are to create a point of reference for the local entrepreneurs, and promote and encourage knowledge of the Castelli Romani, both nationally and internationally. In reaching these aims, they

closely interact with local communities and strongly believe in the importance of knowledge sharing with them. In this vein, they involve young university students, hiring them for stage periods.

In parallel, over the years, destination tourism potential has also been increasingly recognized by public entities, leading to the birth of various public associations and organizations (e.g., Castelli Romani Park, DMO Castelli Romani). Among them, it is worth mentioning the DMO Castelli Romani, founded by the Consorzio Sistema Castelli Romani in 2015, that – since 2018 – has been expressly involved in the production and management of tourist services for destination development. In 2021, the DMO was legally recognized by the Lazio Region as the reference public body for tourism in the area.

«The strategy we are implementing, based on a synergistic collaboration between public and private, is based on a high level of professionalism and entrepreneurship» [DMO Member]

However, most of the interviews highlight the marginal role of these public entities in terms of destination sustainability and innovation. Concerning the DMO, this marginal role is probably due to its recent creation and, therefore, its activities will hopefully produce positive effects in the next few years. Concerning the other local institutions of the 16 municipalities, the interviewees point out that, over time, a lot of public money has been invested in the recovery and enhancement of the natural and cultural heritage of the area but that this heritage today is often left closed and/or in a state of neglect. Moreover, even some attempts in terms of technological innovation – for example, through the creation of apps – aimed at improving the tourist use of the heritage of the area do not seem to have been successful.

«I stayed in Genzano for a week and tried every day to visit Palazzo Sforza Cesarini, but I always found it closed» [Tourist]

4.3 Barriers to virtuous co-evolutionary processes

From the participants' narratives, four interconnected barriers to virtuous co-evolutionary processes (i.e., cooperative relationships) between destination key actors emerge. These barriers mainly arise because sustainable tourism paths within the destination are planned without holistically considering the five determinants identified in the proposed co-evolutionary model.

In fact, the first barrier concerns the lack of systemic management (i.e., *systemic approach*) of the various local sub-systems and the related specific characteristics and needs. In this regard, despite the destination having its DMO, there is another one called 'DMO Around Rome', led by the Parco dei Castelli Romani, which comprises the 16 Castelli Romani municipalities plus others.

«In this area, two DMOs have been legally established in just one year: one refers only to the Castelli Romani, and the other also includes other areas. I honestly don't understand the meaning of this; they seem to be uncoordinated actions taken only to obtain public funding» [Local policymaker]

Moreover, as a second barrier, the local entrepreneurs point out that they do not feel actively involved in the DMO decision-making processes (i.e., *multistakeholder decision-making processes*), which are still mainly top-down.

The third barrier reported by interviewees is the absence of both digital tools and sufficient infrastructure (especially in terms of public transport), which negatively affects the possibility for the Castelli Romani destination to be better known and reached by local communities and tourists (i.e., *tourist experience* and *social responsibility*).

The fourth and last barrier concerns the lack of knowledge-sharing processes (i.e., *inter-organizational knowledge transfer processes*) to collaborate for destination sustainable development properly. These processes are crucial to *i)* increase the knowledge (also of the local community) related to the Castelli Romani heritage and *ii)* develop innovation-oriented entrepreneurial skills, also of the local institutions.

5. Discussion

According to the proposed co-evolutionary model, the above findings show that Castelli Romani is a destination with a high tourism potential largely unexpressed because the five determinants are not adequately considered. In other words, in the destination, the relationships between natural and cultural resources, tourism firms, institutions, communities, and tourists are not always effective (i.e., able to produce virtuous co-evolutionary processes). In other words, the destination is not providing an integrated tourism offering able to express a cohesive tourism vocation capable of contributing to its market position and recognition. In this perspective, and in line with Casado-Montilla and Pulido-Fernández (2021), the ability to attract tourists presupposes that the services offered by the local

tourism firms and institutions are appropriately managed. Moreover, to design and build an integrated tourism offering, the Castelli Romani should recognise the tourist segments that can find the highest satisfaction according to the specific municipalities' resources. In this vein, it should not be forgotten that – at least as long as the Covid-19 consequences persist – uncrowded places rich in natural and cultural resources represent a fruitful market segment (Park et al., 2021). It is also desirable that the exaltation of local identities is realised innovatively through the application of new technologies (such as video maps, GPS, tag clouds, Apps, and QR codes) and the birth of sustainability-oriented start-ups (UNWTO, 2021). Innovations are also important for guaranteeing adequate mobility, safety, and urban decorum services, with beneficial effects for both local communities and tourists.

All of this is possible if the various actors of the destination adopt integrated actions and have shared priorities regarding what to develop and sustain (Hillebrand, 2022). Thus, the ability of the DMO to involve and motivate the different stakeholders in collaborative processes is crucial. This is particularly true when referring to the sustainability-oriented entrepreneurs operating in the destination. In fact, their involvement may strongly reinforce the DMO entrepreneurial vision by extending the capacity building, responsibility, care for the environment, dissemination of knowledge, and networking development. In other words, the current DMO has to redefine and reinterpret its role, involving and guiding all the stakeholders within the destination towards a sustainable development strategy (Bachinger et al., 2022). This will positively affect – according to the circular relationships of the proposed co-evolutionary model – the wider natural and socio-economic system. This latter, in turn, will contribute to extending the destination's sustainable development, thus, its competitiveness.

6. Conclusions

By adopting a co-evolutionary lens, this study has addressed the question, "What management model can a destination adopt to consider all its actors and foster its sustainable development holistically?". This allowed to provide a co-evolutionary destination management model that promotes sustainable development by grasping the relationships and temporal dynamics among destination key actors. This study suggests that the sustainability-oriented entrepreneurs operating in the destination need to be actively involved in the DMO to reinforce the entrepreneurial vision of destination sustainable development. This can be done according to the five determinants of virtuous

co-evolutionary processes (i.e., tourist experience, systemic approach, multistakeholder decision-making processes, inter-organizational knowledge transfer processes, and social responsibility), bringing out the local quality system through integrated and dynamic management of all local resources at multiple levels and creating value for everyone. All of this provides interesting theoretical and practical implications.

Concerning the *theoretical implications*, this article advances destination management studies by adopting a co-evolutionary approach. This allows answering the call by Guerreiro (2022), developing new tourism destinations management models able to consider – holistically and dynamically (Fyall & Garrod, 2019; Hristov & Petrova, 2018) – the complexity of the relationships among multiple actors within a destination (Paniccia et al., 2018). By doing so, this paper expands previous co-evolutionary tourism studies (e.g., Cristofaro et al., 2020; Paniccia & Leoni, 2019) by considering multiple destination actors simultaneously, thus providing a more comprehensive overview of destination development. Moreover, the case study findings align with previous investigations' results (e.g., Komppula, 2014; Paniccia & Baiocco, 2020) regarding the crucial role played by tourism entrepreneurs for destinations' sustainable development (Agapito et al., 2022). This result confirms some of the most recent destination management studies (e.g., Sørensen & Grindsted, 2021) that emphasise the importance of sustainable entrepreneurship, suggesting that ecosystems can be sustained and reinforced through entrepreneurial practices that consider environmental and social issues in addition to economic concerns (Agapito et al., 2022). Lastly, this study corroborates several earlier investigations on tourism cooperation (e.g., Snis et al., 2021), suggesting that the overall destination success depends on the existence of collaboration among the various stakeholders aimed at creating trust, collective vision and objectives, based on an interpersonal and relational approach (Beritelli, 2011).

Concerning the *practical implications*, the results from this article offer a co-evolutionary destination management model that can help tourism entrepreneurs and policymakers. In fact, the application of the provided model allows identifying targeted actions for the destination's sustainable development and competitiveness, according to the five identified determinants. These actions are mainly based on the integration, from a holistic and dynamic view, of the different interacting factors (i.e., natural and cultural resources, tourism firms and other organisations, institutions, communities, and tourists) within the destination. Practically speaking, the destination has to *i)* integrate local sub-systems identities, through appropriate activities and tools, within a system perspective that combines the entrepreneurial vision with the policymakers one; *ii)* innovate the tourism offering by promoting the birth and development of

start-ups and digitalising content and processes; *iii)* identify specific tourist targets, taking into account the dynamics of co-determination between tourism supply and demand; and, *iv)* invest in advanced training courses to develop entrepreneurial and managerial skills and to raise the quality and capacity building of tourism firms and institutions.

Overall, the results achieved in this article are interesting for scholars, entrepreneurs, and policymakers, although they present some limitations that open the doors to future fields of investigation. Indeed, the model cannot be standardisable, but it can be transferred to other destinations, at national and international levels, to investigate the importance of natural and cultural resources, the role played by tourism firms and local institutions, and the reasons behind the barriers to virtuous co-evolutionary processes that inhibit sustainable tourism development paths. Another limitation of the study concerns the qualitative and interpretive adopted approach to the interviewees' stories. In this respect, we suggest that future research should include mixed methods by supporting the analysis and also through quantitative tools.

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CEO Succession and Shared Leadership: which factors shape firm performance?

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Abstract

This paper investigates the effect of CEO succession on the performance of family firms characterized by collegial leadership and the moderating role of the Family CEO, of the board of directors and by the size of the firm. The empirical analysis, carried out on a sample of Italian family firms for the years 2012-2016, shows a positive effect of succession on the performance of family businesses with shared leadership. Moreover, this relationship is negatively moderated by the composition of the co-leadership structure, the characteristics of the board of directors and the size of the firm.

Keywords: shared leadership; CEO succession; family firms; performance

Sommario

Questo paper studia l'effetto delle successioni sulle performance delle imprese familiari caratterizzate da leadership collegiale e il ruolo di moderazione svolto dalla presenza del CEO familiare, dal consiglio di amministrazione e dalla dimensione dell'impresa. L'analisi empirica, svolta su un campione di imprese familiari italiane per gli anni 2012-2016, mostra un effetto positivo delle successioni sulle performance delle imprese familiari caratterizzate da leadership collegiale. Tuttavia, questa relazione è negativamente moderata dalla composizione della struttura della leadership collegiale, dalle caratteristiche del consiglio di amministrazione e dalla dimensione dell'impresa.

Parole chiave: leadership condivisa; successione; imprese familiari; performance

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1. Introduction

The world has become increasingly globalized, changing forever the way of doing business, which require an extensive set of skills and capabilities which are unlikely to be concentrated in one single individual (Pearce and Conger, 2003; Hasija, 2016; Bövers and Hoon, 2020).

This fast-paced environment poses a real challenge for some companies, creating the urgency of changing leadership model, revolutionizing the traditional conception of having one CEO leading one company (Cristofaro *et al*., 2022).

Indeed, in the last decade some companies have decided to appoint two or more CEOs at the top of their ladder to guarantee a complete set of competencies supported by heterogeneity of points of view which could permit companies to be successful in such a challenging environment (Krause *et al*., 2015; Döös and Wilhelmson, 2021).

The concept of mutual leadership, in the management literature, was first introduced by Bowers and Seashore in 1966 (Pearce and Conger, 2003). According to their research, leadership could be exercised by peers and this process of mutual leadership influence was able to positively affect firm's performance. More recently, scholars challenged the predominant existing view by stating that leadership is an activity that can be shared among multiple people rather than being exclusively attributed to one single individual (O'Toole *et al*., 2002; Pearce and Conger, 2003).

Based on this premise, several definitions of mutual or shared leadership were introduced by different scholars (Zhu *et al*., 2018). Locke (2003) classifies leadership models in four categories, including top-down model, bottom-up model, lateral model, and integrated model, which is a combination of the former three categories. Shared leadership coincides with the lateral leadership model, and it is defined as a "*lateral influence among peers"* (Pearce and Sims, 2002, p.176) rather than vertical downward influence by an appointed leader.

This new theoretical view which gained remarkable attention from numerous scholars was reflecting a paradigm shift taking place in the business world due to the increasing complexity involving organizations, especially after Covid-19 (De Massis and Rondi, 2020; Ahlstrom *et al*., 2020; Arduino *et al*., 2021).

Appointing two or more Chief Executive Officers (CEOs) means having an organization run jointly by those individuals who are known as co-CEOs and who share executive powers. The reasons for which a company might choose to have more than one CEO in charge can be multiple. Firstly, co-CEOs might be appointed after a merger, to have both CEOs of the former

companies leading the new entity. However, this choice comes with some challenges since these CEOs have never worked together before and there is no trust-based relationship on which their cooperation can be founded (O'Toole, Galbraith and Lawler, 2002). Indeed, they happen to work together due to forced circumstances, with no previous experience or willingness to share their power. On the other hand, co-CEOs might be co-founders of a firm, who willingly decided to become partners and lead together the company. In this circumstance, it becomes easier to set up a well-working team since the two members have spontaneously decided to work together (Krause, Priem and Love, 2015).

Moreover, co-leadership is sometimes used in family businesses, where members of the same family are appointed as CEOs. This solution can be successful as long as is not employed to avoid a choice among potential CEO successors; instead, it is a powerful solution when the company needs complementary skillsets and points of views that cannot be embedded in only one individual (O'Toole, Galbraith and Lawler, 2002).

Despite the relevant interest of scholars regarding co-leadership implementation as well as the increasing trend of adoption in family firms as a succession mechanism, literature about the topic is still in its infancy.

Indeed, only a few papers can be retrieved on the topic of shared leadership implementation in family firms. Cater and Justis (2010), for example, using a qualitative approach, find eight factors that affect shared leadership in multi-generational family firms, and envision shared leadership as a viable alternative to primogeniture or the choice of a single successor. Other studies concur that while excessive competition among successor group members will hinder group effectiveness, a «*pattern of cooperation, unified implementation of decisions, mutual agreement to share power and authority, and the development of trust will enhance successor leadership group effectiveness*» (Cater and Kidwell, 2014, p. 217). Moreover, the vast majority of the existing literature about co-leadership in the family business research area is only qualitative, with the exception of the work by Farrington, Venter and Boshoff (2012), which presents, however, a focus restricted to South African sibling teams in family businesses, and is additionally limited by the study of selected team design elements, neglecting other succession process factors.

Scholars have vastly relied on the analysis of a limited number of case studies to identify which are the reasons, the benefits, and the pitfalls of such a model. However, no quantitative analysis has been performed to understand which is the actual impact of this leadership model on family businesses performance when succession is undertaken.

Therefore, the aim of this paper is to fill the gap identified by conducting quantitative research about the adoption of co-leadership model in Italian

family firms in the context of management succession, to draw conclusions on its impact of firm financial performance.

This study therefore aims to answer the RQ: *What is the impact of shared leadership succession on the financial performance of Italian family businesses?*

The final sample consisted of 102 Italian firms, carefully selected by the Aidaf-Unicredit-Bocconi (AUB) Observatory on family firms.

The present research makes a significant contribution to the existing literature by using a quantitative lens to investigate the shared leadership model in succession processes, thus expanding the literature on CEO succession in family firms. In addition, this study contributes to the literature on shared leadership by taking a quantitative approach to assess its impact on firm financial performance. This study represents one of the first of its kind, as most studies on co-leadership to date are qualitative in nature.

2. Theoretical background

2.1. Shared Leadership

The growing literature on leadership has brought to the proliferation of several definitions of such concept, increasing the lack of consensus among scholars on how to define what leadership is (Dinh *et al*., 2014; Silva, 2016).

According to research by Silva (2016, p. 3), trying to provide a comprehensive definition accounting for multiple standpoints, leadership can be defined as «*the process of interactive influence that occurs when, in a given context, some people accept someone as their leader to achieve common goals*». Hence, this definition reflects the evolving nature of leadership, since it goes beyond the traditional view according to which leadership is nothing but a personal quality, also stressing the importance of both the followers and the context to the leadership process (Van Seters and Field, 1990; Silva, 2016).

Leadership is considered one of the most important elements contributing to the success or failure of organizations, which clearly depend on the achievement of organizational objectives (Sonmez and Adiguzel, 2020). Traditionally, leadership theory was developed considering a one-dimensional and individualistic perspective, according to which organizations should be led by a single powerful leader responsible for firm's performance, usually known as CEO (Van Seters and Field, 1990; Hasija, 2016; Feigen, Jenkins and Warendh, 2022). This paradigm conceived leadership as centered around one single individual, powerful enough to undertake strategic decisions and

exert his top-down influence on subordinates to align them to the achievement of strategic objectives (Pearce and Conger, 2003).

However, starting from mid-20th century, the first research contemplating the possibility of having more than one individual holding a leadership role appeared. For example, Yukl (2006) states that shared leadership is the result of social interactions from which collective capabilities are gathered and employed to exert mutual influence. Moreover, Pearce and Sims (2001) provide a further definition of shared leadership which is in line with those previously mentioned. Indeed shared leadership is defined as "a process of shared influence between and among individuals". In addition, Pearce and Sims (2001) provide a further clarification of two concepts that nowadays might be misused as synonyms: shared leadership and co-leadership. Indeed, co-leadership refers to situations in which "two individuals simultaneously engage in one leadership position" (Pearce and Sims, 2001). Therefore, co-leadership can be classified as a peculiar case of shared leadership in which leadership is shared only between two individuals.

2.2. Diffusion of shared leadership: focus on Italian context

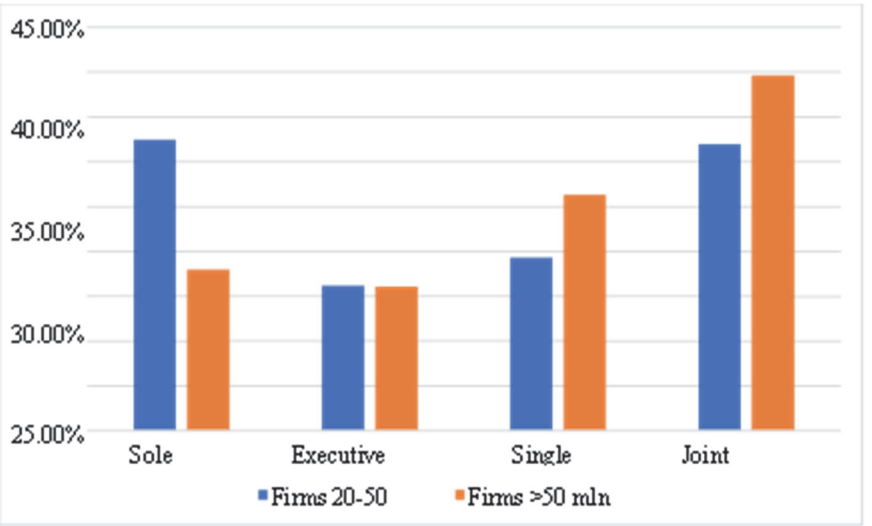
In the last decade some companies have decided to appoint two or more CEOs at the top of their ladder to guarantee a complete set of competencies supported by heterogeneity of points of view which could permit companies to be successful in such a challenging environment (Krause, Priem and Love, 2015). Opting for shared leadership is not such a new practice, indeed, some of the first attempts of co-leadership have been undertaken in the '80s (O'Toole, Galbraith and Lawler, 2002).

Shared leadership appears to be more common in countries such as Korea. Indeed, Yoo and colleagues (2021) employ a dataset of Korean listed companies and 37.3% of those firms has a co-leadership structure in place.

Contrary, the rarity of co-leadership structures in US firms is testified by Dennis, Ramsey and Turner (2010), since only 0.8% of their sample was adopting co-leadership. However, the same result cannot be confirmed when it comes to US family businesses. Indeed, in Arthur Andersen-MassMutual American Family Business Survey of 1997, more than 11% of respondent firms declared to have two or more CEOs (Alvarez and Svejenova, 2005). Moreover, the American Family Business Survey in 2002 reported that almost 9% of respondents had two co-CEOs, 3.5% had more than two co-CEOs while more than 35% of respondents declared that co-CEOs structure would have been a likely solution for transition to the next generation (Alvarez and Svejenova, 2005).

When specifically focusing on family business sector, shared leadership has become a widespread reality and appointing more than one CEO at the top of organizations has affirmed as a common practice (Cater and Justis, 2010; Farrington, Venter, and Boshoff, 2012; Cater and Kidwell, 2014; Cater, Kidwell and Camp, 2016; Bövers and Hoon, 2020; Cater and Young, 2019). Considering the reasons why co-leadership is established, Arena, Ferris and Unlu, (2011) found out that 20% of sample firms opting for co-CEOs did so in relation to M&A activities, 25% was represented by family firms due to succession influence, 15% used this model because of the existence of multiple corporate co-founders and only 9% employed co-leadership to smooth CEO succession. Similar results were confirmed by Arnone and Stumpf (2010) in their qualitative research interviewing 10 co-CEOs. Being Italy one of the countries in which family firms represent the backbone of the economic landscape, it is worth considering some statistics about the adoption of this model. As shown by Figure 1, joint leadership is a widely adopted option in Italian family firms of both small and medium/large size. Indeed, this leadership model is chosen by 32% of small family firms and 39.6% of large ones.

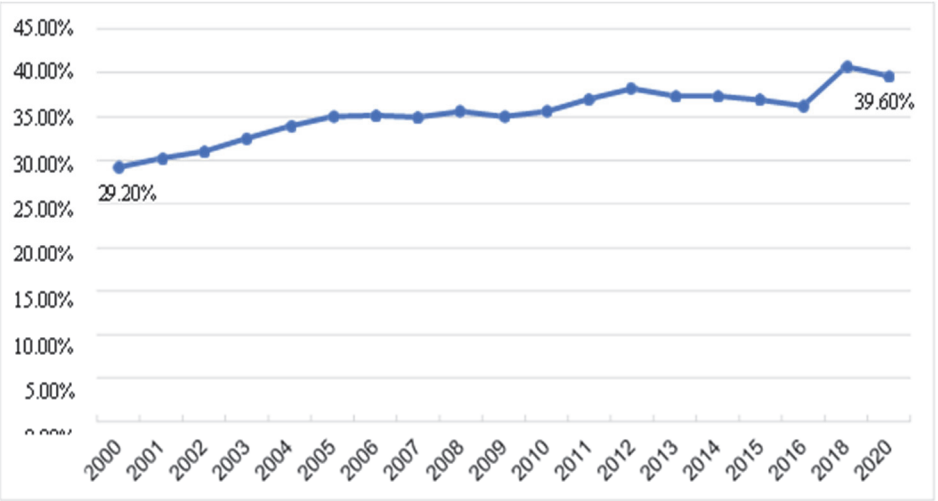
Figure 1 - Leadership models in Italian family firms



Source: Corbetta & Quarato, 2022

As shown by figure 2, in the last 20 years, firms belonging to the AUB observatory population increasingly adopted this leadership model, shifting from an adoption rate of 29,20% in 2000, to a peak of 39,60% in 2020

Figure 2 - Adoption of collegial leadership by AUB



Italian family firms in the last 20 years

Source: Corbetta & Quarato, 2022

3. Literature review and Hypotheses Development

3.1. Shared leadership succession and financial performance

Family business literature has been favoring the view considering CEO succession as a negative event for the firm, arguing that it is a threat for both organizational stability as well as family unity (Minichilli *et al*., 2014). Nonetheless, the existing quantitative studies mainly focus on individual succession, neglecting the increasing tendency of family businesses to implement co-leadership structures as a succession mechanism (Cater, Kidwell and Camp, 2016).

Indeed, among multiple case studies proposed some family firms do achieve organizational continuity and higher performance by implementing co-leadership structure to manage succession, while others fail to do so, showing that co-leadership models implemented in the context of succession worsen family firms' performance (e.g. Farrington, Venter and Boshoff,

2012; Cater and Kidwell, 2014; Cater, Kidwell and Camp, 2016; Bövers and Hoon, 2020; Cisneros *et al*., 2022). These discordant results are due to the complexity of co-leadership model, which can be a double-edged sword since it entails both numerous benefits and challenges (O'Toole *et al*., 2002; Cater and Kidwell, 2014).

Implementing co-CEOs structures to deal with management succession in family firms is perceived by some incumbent leaders as a great solution to avoid one of the toughest decisions to be made around succession: choosing among multiple next generation members (Cater, Kidwell and Camp, 2016; Montemerlo, 2021). In this case, co-leadership is implemented following exclusively family and ownership considerations, making family matters prevail over business matters. In this scenario, co-leadership is by nature doomed to fail, having negative consequences on performance. Indeed, when a pure family logic is implemented, successors are appointed as co-CEOs without carefully evaluating the propension of heirs to hold managerial positions. In this way, the risk of appointing next generation members which are underqualified for the position of CEO materializes, justified by the exclusive objective of avoiding potential conflicts that might result from the appointment of a single leader (Farrington, Venter and Boshoff, 2012; Cater and Kidwell, 2014; Montemerlo, 2021). However, when no objective business reasons are there to justify joint leadership succession, co-CEOs teams will reflect a certain level of instability due to the lack of a solid base for their existence. Indeed, no clear roles and responsibilities will be defined, and this will bring a remarkable level of confusion not only within co-CEOs but also towards the rest of the corporation (Arena, Ferris and Unlu, 2011; Yoo *et al*., 2021).

Cater, Kidwell and Camp (2016) provide extensive examples of these negative effects, showing that when co-leadership follows the negative track identified, co-CEOs engage in dysfunctional behaviors and divergent interests arise. Indeed, lack of clarity among co-CEOs translates first in disagreements that slow down decision-making and subsequently brings to relationship conflict, which cause co-leadership failure and negative impact on firm's performance (Cater, Kidwell and Camp, 2016).

Hence, based on these arguments:

Hypothesis 1a: *There will be a negative relationship between joint leadership succession and financial performance in family firms.*

On the other hand, co-leadership succession can have positive outcomes if undertaken at different conditions. When family/ownership considerations are complemented by solid business reasons to implement co-leadership around succession, this model can bring successful performance outcomes.

Firstly, since co-leadership succession is implemented considering solid business reasons, the incumbent generation will ensure the appointment of successors which can really contribute with adequate complementary competencies and skills to meet the business needs identified. When different backgrounds and points of view are integrated, usually this results in more creative and effective decision-making (O'Toole *et al*., 2002; Cater and Justis, 2010). In addition, when adequate business reasons are defined, it becomes easier to define roles, responsibilities, and duties in a clear way preventing ambiguity from insinuating among co-CEOs. This systematic approach will favor higher coordination and clarity among co-CEOs as well as towards the rest of the organization (Montemerlo, 2021). Having higher coordination and clarity does not mean that co-CEOs will never engage in conflicts. However, these conflicts are more likely to be task or cognitive ones, hence referred to which goal should be achieved and how this should be done (Cater, Kidwell and Camp, 2016).

Family business literature has demonstrated that these two types of conflict are not detrimental for the firms, instead, they can be beneficial because having divergent opinions on task and processes to reach certain goals can stimulate conversation among the actors involved, resulting in enhanced decision-making (McKee *et al*., 2014). This outcome reflects the positive track identified by Cater, Kidwell and Camp (2016), according to which the enhanced coordination, effective conflict management and joint decision-making at the conditions just mentioned brings to preserving business continuity as well as enhanced firm's performance.

Moreover, another reason for which joint leadership succession could bring positive performance is the natural propensity of this model to permit the creation of inter-generational leading teams in which senior generation provides coaching to next generation. This structure allows for a smooth and gradual succession process, avoiding the risk of an abrupt change in leadership that creates instability thus negatively impacting performance (Montemerlo, 2021). Indeed, co-CEOs will fine-tune their intra-collaboration supported by a senior member; senior generation will gain increasing confidence about successors and will gradually let go in favor of the next co-leaders and lastly, it is a way for other collaborators to get to know and trust next generation leaders, thing that will avoid confusion and distrust once the full succession process will be completed (Montemerlo, 2021).

Lastly, appointing more than one CEO can also permit the combination of family CEOs and non-family CEOs. The latter can support the former with their professional skills and background favoring the creation of highly effective teams combining the family component with external additional competencies, resulting in a positive impact to firm performance (Poza and Daugherty, 2014).

Therefore, according to these reasons:

Hypothesis 1b: *There will be a positive relationship between joint leadership succession and financial performance in family firms.*

3.2. Family involvement and shared leadership succession outcome

Research on CEO succession in family businesses is extremely extensive and it is mainly focused on understanding the impact on performance following the appointment of either a family CEO or a non-family CEO. Researchers argue that family CEOs could be expected to perform better than non-family ones due to their long-term focus, attachment to the business on the basis of their family ties as well as because they are often transmitted tacit knowledge from predecessors (Bennedsen *et al*., 2007).

However, these points of strengths of family CEOs seem to be offset due to several reasons, which cause their underperformance compared to non-family CEOs. Indeed, several studies shows that if the successor is a family CEO, performance are negatively impacted (Huson, Malatesta, and Parrino, 2004; Bennedsen at., 2007; Lin and Hu, 2007; Luan *et al*., 2018;). This result is owed to the fact that family CEOs are selected from a limited pool of candidates which automatically excludes more competent managerial talents from the selection process (Smith and Amoako-Adu, 1999). Therefore, family members appointment to CEO position seem to translate in nepotism due to the biased decision of the incumbent generation (Bennedsen *et al*., 2007).

In addition, pursuing both economic and non-economic goals is one of the distinguishing features of family businesses when compared to non-family firms (Gomez-Mejia *et al*., 2011). Indeed, family owners usually have a special emotional connection to their firm which represents the recipient of family's affective stock which the family attempts to carefully preserve. This family affective stock has been defined by literature as Socio-Emotional Wealth (SEW) and it has been the focus of extensive research in the family business literature. According to Socio-Emotional Wealth (SEW) theory family owners frame management decisions not only by considering financial goals, but also the preservation of the «stock of affected related value that the family has invested in the firm» (Berrone, Cruz and Gomez-Mejia, 2012, p. 82). Considering the case of shared leadership succession, having co-CEOs teams composed by only family members might make SEW considerations prevail over business needs, therefore resulting in sub-optimal decisions, which determines a negative impact on performance.

On the other hand, many scholars support the superiority of non-family

CEOs appointment in family firms, arguing that non-family CEOs are appointed following a merit logic and can provide valuable contribution to the firm with their professional managerial skills and capabilities which are often lacking in family successors (Bennedsen *et al*., 2007). Based on this, including non-family CEOs when implementing shared leadership succession might be beneficial since non-family CEOs can contribute to business needs with their superior capabilities and, in addition, can support family co-CEOs in balancing economic and non-economic goals, ultimately providing a positive impact to corporate performance. For these reasons, we can expect joint leadership succession family firms implementing co-CEOs teams with at least one nonfamily member to perform better than those appointing only family members as co-CEOs. Therefore:

Hypothesis 2: The financial performance outcome of shared leadership succession is worsened when co-CEOs are only family members.

Considering additional disputed topics regarding family involvement in family businesses, the composition of the Board of Directors is worth particular attention (Rubino, Tenuta and Cambrea, 2017). The Board of Directors (hereafter BoD) has been extensively recognized as the central governance body when it comes to important governance and strategic transitions, including the appointment, evaluation, and retention of the new CEO (Gomez-Meija *et al*., 2011; Berrone, Cruz and Gomez-Mejia, 2012). According to Gomez-Mejia *et al*. (2011), involving family members in the board of directors is one of the key mechanisms employed by family firms to ensure the protection of their SEW. Indeed, appointing family members on the BoD is a way for family ownership to maintain control and exert pressure on top executives' appointments, especially the CEO, such that family's objectives can be pursued (Gomez-Meija *et al*., 2011).

Therefore, following this reasoning, when BoD is closed, meaning fully composed by family members, it is likely that SEW perspective will overcome the financial perspective since the family focus is not adequately balanced by the presence of independent directors, who not only do not belong to the family, but also have no kind of attachment to the business. Therefore, when it comes to joint leadership succession, co-CEOs structure might be the result of pure SEW considerations when the BoD is composed by only family members. Therefore, shared leadership will not be chosen because considered a superior succession model to cope with specific business reasons, but rather to meet SEW objectives. Therefore, according to these reasons, family firms undertaking shared leadership succession are expected to perform worse when the BoD is closed. Consequently:

Hypothesis 3: BoD composed exclusively by family members negatively moderates the financial performance outcome of shared leadership succession in family firms.

3.3. Firm size and shared leadership succession outcome

Co-leadership structures are highly complex models which can provide several benefits, but only if implemented at certain conditions that mitigate their structural drawbacks. The present work hypothesizes that co-leadership succession might be a structure too complex to work effectively in large family businesses. Indeed, the organizational rigidity likely to be caused by the formalization process might hamper effective coordination between co-CEOs. Indeed, co-CEOs could not rely on informal communication and decision-making and should adhere to formal mechanisms which might slow down decision-making and might cause managerial guidelines ambiguity. On the other hand, in small family firms not subjected to organizational complexity, shared leadership succession might be more appropriate and less difficult to implement. Indeed, the informality characterizing these firms might allow easier coordination and communication.

In addition, another reason why shared leadership succession might be successful in small companies could be related to the reliance of small family firms on tacit knowledge as a source of competitive advantage (Martínez, Galván and Palacios, 2013). Small family firms base their competitive advantage on tacit knowledge, whose main resource is represented by predecessors' skills and capabilities (Martínez, Galván and Palacios, 2013). Hence, tacit knowledge is a strategic asset that should be transferred when succession occurs. Since co-leadership succession is a model favoring the transition supported by predecessors coaching to next generation members, it automatically permits the transfer of tacit knowledge, typical of small firms, which can support the achievement of better performance post-succession. Considering these reasons:

Hypothesis 4: Firm size negatively moderates the financial performance outcome of shared leadership succession in family firms.

4. Methodology

4.1. Sample

The present research is mainly based on using archival data. Indeed, the starting point of this analysis is the AUB observatory database, which is the most complete and extensive database available in Italy on family-controlled companies. The dataset included a total of 7679 Italian family firms with observations between 2000 and 2016. Data about ownership, governance, and management were provided for each observed year, together with relevant information about succession (if it was the case). For each firm was present: i) information about whether leadership succession was ever undertaken during the timeframe considered, along with succession year, specifications about the type of succession, CEO number, CEO age, CEO tenure, gender, familiarity, generation in which succession took place; ii) governance data, such as Board of Directors composition, age of directors, length of service, and again gender and familiarity.

Therefore, all the information related to ownership, governance and management were extracted from the AUB Observatory dataset, on the other hand, economic and financial information such as ROA, ROE, revenues, firm age and the other financial indicators considered were retrieved from AIDA (Italian Digital Database of Companies – the Italian branch of Bureau van Dijk databases). To ensure data were available to perform this analysis, the timeframe between 2012 and 2016 was considered. The total number of Italian family firms that experienced a succession in the considered timeframe was 2455 (out of a total of 7679 family firms included in the database). Since the focus of this paper is the generational transition undertaken shifting from sole leadership to joint leadership, all firms that experienced a different type of succession in the timeframe considered were excluded. This selection criteria brought to a total of 130 family firms. Among these firms, 28 had to be excluded since financial data was not available on Aida, resulting in a total of 102 firms included in the sample.

4.2. Variables and Analytical Technique

The dependent variable employed in this study is Return on Equity (ROE), which is calculated as Net Income over Equity and represents a key accounting measure of a firm's financial performance. ROE has been selected since it is widely used in existing CEO succession research (e.g., Datta and Rajagopalan, 1998; Shen and Cannella, 2002; Pérez-González, 2006;

Cucculelli and Micucci, 2008; Zhang and Rajagopalan, 2010; Minichilli *et al*., 2014).

Independent variables included in the model cover information about firms, governance, and CEO succession. Firstly, to test the general effect of joint leadership succession, a dummy variable Succession was constructed, being equal to one for the three years after a joint leadership succession occurred and zero for the three years before succession (as well as for non-succession firms and one-to-one succession firms included as control group respectively in the first and second model). Secondly, in order to assess the impact of the family on succession outcome, a dummy variable named Pure family was included in the model, taking value of one if the co-CEOs team after succession was composed by exclusively of family members, and a value of zero otherwise (as well as for non-succession and one-to-one succession companies). Additionally, the dummy variable Family BoD was included to analyze how the impact of joint leadership succession varied according to the presence of an open or closed Board of Directors. Indeed, Family BoD is equal to 1 if the board is closed, meaning composed of only family members, while equal to zero if at least one director is non-family. Along with the variables just described, an additional independent variable was included, Big company. It is a dummy variable equal to one if the size of the firm (measured in terms of revenues) is above 50 million euros, and zero otherwise. This last independent variable was considered to test if the joint leadership succession effect changed according to whether the firm was small-medium or large size.

The set of firm controls of this regression analysis includes Firm size, Leverage, Cash holding, Tangibility, Firm age, CEO number, CEO age and Family directors. Firm size measures the size of the company computed as the natural logarithm of annual sales, which has been often employed as a contextual variable which could have an impact on firm performance (Cucculelli and Micucci, 2008; Ansari, Goergen, and Mira, 2014; Minichilli *et al*., 2014). In order to control for capital structures and liquidity differences which might influence firm financial performance, the two variables Leverage and Cash holding were included, as done in previous research (e.g. Amore *et al*., 2021). The former was calculated as debt over total assets and the latter was computed as cash and cash equivalents over total assets. Tangibility calculated as total fixed assets over total assets. Additionally, Firm age was included to control for differences in developmental stage of companies (Cucculelli and Micucci, 2008; Amran, 2012; Luan *et al*., 2018; Amore *et al*., 2021). Indeed, it was found that older firms are more likely to reach lower performance than younger firms due to rooted routines difficult

to dismantle and conservatism (Luan *et al*., 2018). This variable was computed as the natural logarithm of the number of years since the firm was founded. Lastly, three control variables accounting for management and governance characteristics were added. CEO number was computed as the number of CEO of the company, CEO age reflects the age of the CEO and in case of multiple CEOs, an average of their age was considered, finally, Family directors expresses the percentage of family directors sitting on the BoD.

In addition, in order to control for unspecified time-specific effects, meaning time-specific factors not included in the model which could have an impact on performance such as common shocks, year dummies were included in the model (Karaevli, 2007; Cucculelli and Micucci, 2008; Minichilli *et al*. 2014). Moreover, firm fixed effects were included to focus the analysis on within-firm variation of performance controlling at the same time for time-invariant firm characteristics which might have an impact on performance, such as the industry in which the company operates and the geographical location of the firm, avoiding issues related to omitted-variable bias (Karaevli, 2007; Cucculelli and Micucci, 2008; Minichilli *et al*. 2014).

Table 1 – Variables measures

	Variable	*Measurement*
Dependent Variables	ROE	Continuous Net Income/Equity
Independent Variables	Succession	Dummy 1 = years after succession; 0 = Otherwise
	Pure family	Dummy
		1 = all co-CEOs belong to the family; 0 = Otherwise
	Family BoD	Dummy
		1 = all directors belong to the family; 0 = Otherwise
	Big company	Dummy
		1 = firm revenues > 50 mln; 0 = Otherwise

segue tab. 1

Control Variables	Firm size	Continuous
		Natural logarithm of revenues
	Leverage	Continuous Debt/Total Assets
	Cash holding	Continuous
		Cash and Cash Equivalents/Total Assets
	Tangibility	Continuous
		Fixed Assets/Total Assets
	Firm age	Continuous
		Natural logarithm of years since the firm's founding
	CEO number	Continuous
		Number of CEO of the company
	CEO age	Continuous
		Age of the CEO (if a team average age of co-CEOs)
	Family directors	Continuous
		% of family directors sitting on the BoD

To test the hypotheses introduced in the previous section, difference-in-differences (DiD) models were used, estimated by means of fixed effects regression models including time-fixed effects. In the last decade, DiD has been increasingly applied in CEO succession research in family businesses (e.g. Cucculelli and Micucci, 2008; Minichilli *et al*. 2014), appearing to be an adequate method to be applied in this study. Indeed, the advantage of this type of model relies on the possibility of testing the specific effect of various succession characteristics and firm/governance characteristics (in our case the presence of only family co-CEOs or not; the presence of open or closed BoD; firm size) while controlling for the general effect of succession. In addition, employing a fixed effect model to estimate the difference-in-difference allows to control for time-invariant characteristics, and including time-fixed effects allow control for common shocks.

The present work employs two different models to test hypotheses. Model 1 includes as control group all the family firms of the AUB Observatory dataset that did not experience succession between 2012 and 2016. On the other hand, Model 2 employs as control group all the family firms of the AUB Observatory dataset that experienced an individual succession between 2012 and 2016. Both models are presented in order to provide a more solid support to test hypotheses.

According to the usual design of DiD models, the variable Succession was codified in order to identify the period pre and after succession. Indeed, Succession takes value of one for the years post-succession and a value of zero for the years pre-succession (value of zero was also attributed to all years of the control group, which is represented in the first model by firms that did not experience succession and in the second model by firms that undertook individual succession).

Subsequently, the model was extended to multiple treatments regarding the degree of family involvement in the firm, which is measured by the variables Pure family and Family BoD, and the firm size, measured by the proxy Big company. The effect of these three variables on joint leadership succession was tested by introducing an interaction term between the independent variable of interest and the variable Succession. Therefore, for example, the effect of having multiple family CEOs was encoded as an interaction term Succession*Pure family which is equal to one for all the years after succession if the firm had only family CEOs and zero for the years pre-succession, for firms with at least one non-family CEO after succession and for firms of the control group. The same approach applies to Family BoD and Big company.

4. Results

Tables 2 and 3 present means, standard deviations, and correlations among the variables included in the model. Given the fact that most of the coefficients are near the value of one, the model entails acceptable levels of correlations. This result is valid when included in the sample as control group either non-succession family firms or individual succession family firms.

Table 2 – Means, standard deviations and correlations (Model 1)

Sample including as control group non-succession family firms															
	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1 ROE	0.0905999	0.3212163	1												
2 Succession	0.0195051	0.1382963	0.0106	1											
3 Pure_Family	0.017422	0.1308419	-0.0035	0.4627	1										
4 Family_BoD	0.7786264	0.4151845	0.0108	-0.1315	-0.0034	1									
5 Firm_Size_Dummy	0.3399823	0.4737178	0.0107	0.0231	0.0022	-0.0779	1								
6 lnFirm_Size	17.6013	0.9241877	0.0333	0.0078	-0.0034	-0.0721	0.679	1							
7 Leverage	0.2486358	0.1836945	-0.1	0.0222	0.0263	0.002	0.0428	0.0179	1						
8 Cash_Holding	0.0962488	0.1144136	0.1323	-0.0022	-0.0097	0.0164	-0.0023	0.0062	-0.444	1					
9 Asset_Tangibility	0.2103836	0.1708888	-0.0886	0.0145	0.0118	0.0285	0.0676	0.0664	0.2002	-0.2044	1				
10 lnFirm_Age	3.324325	0.6280967	-0.041	0.0068	0.0013	0.0508	0.0012	0.0459	-0.0161	-0.0128	0.1648	1			
11 CEO_Number	1.96585	1072068	0.0135	0.0543	-0.0417	0.0905	0.0253	0.0083	0.0143	-0.0048	0.0248	0.0678	1		
12 CEO_Age	58.86538	10.19327	-0.014	-0.1525	-0.0197	0.0437	0.0441	0.0541	-0.044	0.0701	0.062	0.1493	-0.0768	1	
13 Family_Directors	0.8859639	0.2403255	0.0118	-0.1574	0.0141	0.8899	-0.0673	-0.0579	-0.0002	0.0127	0.0276	0.0662	0.1759	0.0539	1

Table 3 – Means, standard deviations and correlations (Model 2)

Sample including as control group individual succession family firms															
	Mean	*SD*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*
1 ROE	0.07892	0.5949	1												
2 Succession	0.0716	0.2580	0.0169	1											
3 Pure family	0.0632	0.2434	0.0023	0.4314	1										
4 Family BoD	0.3277	0.4694	-0.0161	0.0342	0.2409	1									
5 Big company	0.3734	0.4837	-0.0257	0.0276	-0.0096	-0.0356	1								
6 Firm size	17.6367	1.2287	-0.0175	0.0038	-0.001	-0.0113	0.6675	1							
7 Leverage	0.2459	0.1885	-0.1031	0.0444	0.0456	0.0112	0.0535	0.0746	1						
8 Cash holding	0.09128	0.1106	0.0916	0.0097	-0.0063	0.0081	-0.0189	0.0261	-0.3316	1					
9 Tangibility	0.19823	0.1733	-0.0791	0.0507	0.0473	0.0505	-0.0215	0.0219	0.2491	-0.1878	1				
10 Firm age	29.1839	17.4521	-0.0307	0.0813	0.0785	0.0061	0.1396	0.1824	0.0992	-0.0643	0.2363	1			
11 CEO number	1.0991	0.4082	0.0161	0.8737	0.3401	0.0114	0.051	0.0245	0.0142	0.031	0.0511	0.0887	1		
12 CEO age	54.9787	10.3183	-0.0241	-0.1923	0.0684	-0.0152	-0.0163	0.0098	0.0169	-0.0123	0.0598	0.0264	-0.1503	1	
13 Family directors	0.65044	0.3104	-0.0065	-0.0326	0.2169	0.7863	-0.0304	-0.0217	-0.0002	-0.0347	0.0092	0.0329	-0.0409	-0.0037	1

Firstly, the stand-alone effect of succession was tested by running a model including the variable Succession and the group of control variables together with year dummies and firm fixed effect. Table 4 shows the result of this baseline model, in particular Model 1 uses as control group family firms that did not experience succession between 2012 and 2016, while Model 2 uses as control group family firms that experienced individual succession between 2012 and 2016. Both models support hypothesis 1b while rejecting hypothesis 1a, since the coefficient of the variable Succession is positive and statistically significant (respectively $p<0.01$ and $p<0.05$) in both models. Therefore, joint leadership succession improves a firm's performance.

Table 4 – Stand-alone effect of joint leadership succession

	Model 1: Control group firms no succession	*Model 2: Control group firms individual succession*
Succession	.1499182***	.1506596**
Firm size	.0212105***	.0505744***
Leverage	-.1680961***	-0.0924813
Cash holding	.1929876***	0.08687
Tangibility	-0.0771186	-.3430409***
Firm age	-0.0355764	-0.0233242
CEO number	-0.003392	-0.0220455
CEO age	0.0015223	-0.000544
Family directors	-0.0044275	-0.0136878
Year Fixed Effects	Yes	Yes
Firm Fixed Effects	Yes	Yes
R-squared	0.0627	0.0385
Observations	15.842	4.212

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5 presents the result of the remaining models which are used to test the impact of CEO family, BoD composition and firm size on the outcome of joint leadership succession.

Table 5 – Family involvement and firm size effect on joint leadership succession

	Control group: non-succession firms			*Control group: individual succession firms*		
	Model 3: Pure Family	*Model 4: Family BoD*	*Model 5: Big company*	*Model 6: Pure Family*	*Model 7: Family BoD*	*Model 8: Big company*
Succession	.2019***	.1848***	.1875***	.2322***	.2064***	.1742***
Succession*Pure family	–.1229**			–.1422***		
Succession*Family BoD		–.0934*			–.1125***	
Succession*Big company			–.0957*			–.1039**
Firm size	.0216***	.02155***	.0211***	.0514***	.0511***	.0509***
Leverage	–.1691***	–.1683***	–.1675***	–.0951	–.0927	–.0912
Cash holding	.1934***	.1936***	.1922***	0.0881	0.0871	0.0834
Tangibility	–.0730	–.0738	–.0782	–.3307***	–.3338***	–.3458***
Firm age	–.0355859	–.0357998	–.0366	–.0266	–.0261	–.0246
CEO number	–.0047	–.0045	–.0025	–.0354	–.0317	–.0079
CEO age	0.0011	0.0012	0.0014	–.0007	–.0007	–.0005
Family directors	0.0001	0.0029	–.0038	–.0085	–.0225	–.0127
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.0624	0.0622	0.0637	0.034	0.0344	0.04
Observations	15.842	15.842	15.842	4.212	4.212	4.212

* p < 0.10, ** p < 0.05, *** p < 0.01

Hypothesis 2 states that co-CEOs teams composed by only family members negatively moderate the effect (either positive or negative) of joint leadership succession. In line with this hypothesis, the interaction *Succession*Pure family* shows a negative and statistically significant coefficient both when the control group is composed by non-succession firms ($p<0.05$), as well as when the control group is composed by individual succession firms ($p<0.01$). According to Hypothesis 3, the presence of closed BoD, meaning composed by only family members, negatively moderates the impact (either positive or negative) of joint leadership succession. This hypothesis is confirmed by both models including the two different control groups, since the interaction *Succession*Family BoD* is negative and statistically significant in both cases, with respectively $p<0.1$ when non-succession firms are taken as control group, and $p<0.05$ when individual succession firms are considered as control group. Lastly, hypothesis 4 predicts that joint leadership succession impact (either positive or negative) is negatively moderated by firm size, meaning that large size family firms undertaking joint leadership succession are expected to perform worse than small/medium size counterparts. Both the model including non-succession firms and the model including individual succession firms as control group support hypothesis 4. Indeed, the interaction *Succession*Big company* shows a negative and statistically significant coefficient ($p<0.1$ in both cases).

5. Discussion and conclusion

The literature contribution of this work is twofold. Firstly, it extends the existing literature on shared leadership by providing quantitative research investigating the impact of this model on financial performance, since the existing papers on co-leadership are only qualitative. In addition, it extends the existing family business literature regarding CEO succession because it considers a particular succession mechanism based on the implementation of co-leadership providing a quantitative perspective. Indeed, family business literature is still in its infancy when it comes to co-leadership succession models, and on top of that, research undertaken are only of qualitative nature.

In the first place, drawing on model provided by Cater, Kidwell and Camp (2016) about development of co-CEOs structures in family firms undertaking succession, the impact of this succession model on performance was investigated. Cater, Kidwell and Camp (2016) identifies a negative and a positive track that this transition can undertake, impacting either negatively or

positively firm performance. Given this mixed evidence, supported by other scholars, two divergent hypotheses were tested, arguing that this succession mechanism can either improve or worsen financial performance of family firms. The result, based on a sample of Italian family firms, support the hypothesis of an improvement of performance following shared leadership succession. This result suggests that Italian family firms applied this model responsibly, evaluating the benefits and the challenges of this complex structure, justifying its application with both solid business and family reasons, which in turn determined improved financial performance. Indeed, this model turned out to be particularly suitable to manage succession gradually and smoothly, mitigating the abrupt impact that usually characterizes individual successions, which negatively impacts financial performance.

However, the positive impact of these succession mechanisms can be sustained only if certain conditions are met. Indeed, it was found that excessive family involvement, both within the co-CEO team and on the BoD, reduces the positive effects that this succession mechanism can provide. Indeed, this thesis argues and supports with empirical evidence that excessive family involvement reduces shared leadership succession performance. This result can be interpreted considering SEW theory according to which family members pursue non-economic goals related to the protection of their Socio-Emotional Wealth. Indeed, when family involvement in the firms is not balanced by the presence of outsiders, in the form of non-family CEO and independent directors, family members fail to strike a balance between economic and non-economic goals, making the latter overcome the former. In this way, in the context of shared leadership succession, family members would overstress SEW considerations, making this succession model less effective than it could be.

On the other hand, considering firm size, this work argued that co-leadership succession mechanisms are less effective in large size firms, in which the positive effect of this model is partially offset. This result was supported empirically and can be explained considering the complexity of co-leadership itself. Indeed, co-leadership appears to be a too complex model to be implemented in large size family firms undertaking succession. In fact, the higher level of formalization and administrative rigidity of large firms prevent this succession mechanism from being successful because it does not allow for informal communication, which permits enhanced coordination levels. On the contrary, small family firms are based on informal communication and decision-making mechanisms which foster greater coordination among co-CEOs, resulting in successful generational transitions.

This research provides relevant implications for the practical implemen-

tation of shared leadership succession mechanisms. Firstly, family businesses should consider co-leadership to undertake succession processes, since it has been demonstrated to provide beneficial impacts on financial performance. However, this structure should be implemented in the presence of solid business reasons justifying the need for more than one CEO, rather than being used to avoid choosing among successors.

Additionally, for this succession mechanism to work, it is extremely important for family businesses to find a balance between economic and non-economic goals by foreseeing the inclusion of non-family members in their governance and management structure. To be successful, joint leadership structures as a succession mechanism would require the presence of independent board members as well as at least one non-family CEO.

Lastly, after considering the aforementioned conditions, this model is especially suggested to small family firms, since their informality in communication and decision-making can enhance the effectiveness of such a shared leadership succession mechanism. On the contrary, large family businesses may still consider implementing these succession mechanisms, being aware, however, that the increase in size may partly offset the performance benefits.

This research has several limitations which can represent opportunities for future research. First, the sample employed in this research is based on family firms from Italy, therefore caution should be used in generalizing the results to different countries. In addition, despite the richness of information provided by the AUB Observatory database, the number of successions considered is quite limited. The reasons are mainly related to the fact that co-leadership successions are growing in the family business sector but have not yet become established as a widespread practice, at least in the Italian context. Therefore, future research should be carried out hoping that this phenomenon will become more and more frequent in the future, also considering different contexts with respect to the Italian one. Second, the fact that many companies had to be excluded from the sample due to the lack of available data represents a further limitation of this work. Third, we tried to consider different measures of performance, but unfortunately the empirical results are not confirmed. Fourth, although the model employed control for time-invariant firm characteristics, it might be possible that there are time-variant characteristics that influence the adoption of co-CEOs succession mechanism for which adequate control was not included in the model. Finally, this model does not consider the type of co-CEO structure implemented, meaning the distribution of responsibilities among co-CEOs as well as their background. It would be interesting for future research to investigate how the impact of this succession model changes according to the distribution of tasks

and responsibilities among co-CEOs and the degree to which their backgrounds complement each other.

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Virtual(-only) shareholders' meetings in Italian listed companies: *quo vadis*?

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Abstract

The article focuses on the legacy, if any, once the pandemic crisis is over, of the Italian emergency legislation re: the participation in the shareholders' meeting by means of telecommunications, with particular attention to the regulation of listed companies. Specifically, the topic of virtual(-only) meetings is addressed with a view both to investigating the reasons for their scarce use by Italian listed issuers, and to understanding whether the ability to intervene remotely can become a default rule in Italy. To this end, after analyzing the peculiarities of the Italian legal system – which, de facto, have limited the "virtualization" of the meetings, given that, *inter alia*, in the absence of a specific express provision in the by-laws, a virtual-only meeting appears not to be admissible under Italian law –, possible solutions *de lege ferenda* that may justify a "generalized" regime of virtual meetings in the Italian system will be illustrated.

Key words: shareholders' meeting, virtual-(-only), Italian listed companies, technology

Sommario

Il contributo si concentra sulla possibile eredità della legislazione emergenziale, in tema di intervento all'assemblea dei soci da parte degli aventi diritto mediante mezzi di telecomunicazione, a crisi pandemica conclusa, con particolare attenzione alla disciplina delle società quotate. In particolare, il tema della "remotizzazione" dell'assemblea viene affrontato nell'ottica sia di indagare le ragioni dello scarso utilizzo da parte degli emittenti quotati in Italia delle adunanze virtuali, sia di comprendere se la facoltà di intervenire da remoto possa elevarsi a regola di *default*. A

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tal fine, dopo aver analizzato le peculiarità dell'ordinamento italiano (che, di fatto, hanno limitato la "virtualizzazione" dell'assemblea), atteso che, *inter alia*, in assenza di un'apposita espressa opzione statutaria, non parrebbe ammissibile allo stato un'assemblea *virtual-only*, si proverà a vagliare eventuali soluzioni *de lege ferenda* che potrebbero giustificare nel nostro ordinamento un'assemblea virtuale "generalizzata".

Parole chiave: assemblea, azionisti, virtuale, società quotate, tecnologia

1. The Covid-19 emergency legislation as a boost for virtual(-only) shareholders' meetings in Italy

The Covid-19 emergency led, among other things, to the adoption of social distancing measures which have severely limited the possibility of interpersonal contacts. Beyond the numerous negative repercussions (*i.e.*, economic, social, psychological and anthropological, many of which probably still need to be fully analyzed, especially in view of the medium-long term effects on entire segments of the population), from a corporate governance perspective this brought a further implication, which deserves to be investigated, especially for its possible future evolutions: that is, a significant acceleration towards a more widespread use of remote(-only) meetings of shareholders and board members.

With respect to the former, on which we focus in this paper, from the point of view of the interaction between technology and (corporate) law, this phenomenon is not entirely new: starting from the corporate law reform of 2003, the concept of "*attending the shareholders' meeting by means of telecommunication*" was introduced into the Italian legal system for joint-stock companies. Therefore, the novelty of the post-pandemic scenario lies in the fact that, due to the need to arrange emergency solutions that would minimize the physical co-presence of numerous people in the same place (in order to avoid potentially dangerous gatherings for general health and safety) and the immediate and massive use of technologies capable of facilitating the achievement of this objective, a number of relevant legal institutions (and related legislative provisions), in terms of methods of participation of the shareholders in their meetings, previously mostly relegated to a marginal position (and therefore having largely theoretical relevance), were substantially revitalized.

With specific regard to remote meetings, thus, any query about their admissibility has become ultimately obsolete; the real questions now are the following: (i) is a virtual-only meeting valid? (ii) can this option be "imposed" on the shareholders?

Considering that what had been conceived as a temporary discipline has then converted into a steady regulation (for four and potentially more years)[1], it may be worth reflecting on the possible durable effects of the emergency provisions. Also, because it is now common opinion among Italian legal scholars, even those who traditionally opposed to virtual-only shareholders' meeting in joint-stock companies, due to the alleged existence of legislative hurdles to their implementation, that there appear not to be any real practical reason to prevent the (exclusive) use of information technology in that respect.

However, if we consider the specific context of Italian listed companies and test these preliminary reflections against the empirical data collected during the time period covered by the application of the aforesaid emergency provisions, we realize that, unlike closed companies, where use of telematic meetings (mainly in the form of two-way simultaneous videoconferencing) has been extensive, virtual-only shareholders' meetings for Italian listed companies has largely remained a theoretical option, mainly ignored by them.

In addition, if one looks beyond national borders, one notices a completely different panorama compared to the domestic one: indeed, not only the vast majority of listed companies in Europe have opted for – and held – virtual meetings during the Covid-19 emergency, but also, for example with specific reference to Germany, legislative amendment proposals have been presented (and later adopted) to make remote participation as the ordinary form of attending the meeting for the shareholders.

Hence, a further question that may be worth asking concerns the reasons for such a scarce use by Italian listed companies of remote meetings. Reasons that, considering the opposite trend that emerged in the rest of Europe, must be somehow related to circumstances endogenous to the Italian (legal?) system and which, in our opinion, can be grouped in the following three main categories: (i) legislative obstacles; (ii) "structural" obstacles; (iii) technical obstacles.

As to the first category, we refer to those barriers relating (a) specifically, to the emergency regulation concerning listed companies (that contemplat-

[1] We refer to the so-called "Cura Italia" decree (Legislative Decree no. 18, dated 17 March 2020, containing "*Measures to strengthen the National Health Service and economic support for families, workers and businesses connected to the epidemiological emergency from COVID-19*", converted, with amendments, into Law no. 27 dated 24 April 2020, the effects of which were most recently extended (i) until 31 July 2022 by virtue of Legislative Decree no. 228 dated 30 December 2021, converted, with modifications, into Law no. 15 dated 25 February 2022, and eventually (ii) until 31 July 2023 by virtue of Legislative Decree no. 198 dated 29 December 2022 (so-called "Milleproroghe" Decree), converted into Law no. 14 dated 24 February 2023.

ed the possibility to have recourse to the so-called "*rappresentante designato*" pursuant to art. 135-*undecies* of the Italian Consolidated Law on Finance), and (b) more generally, to corporate law applicable to all joint-stock companies (that leaves the choice of holding virtual meetings to a specific opt-in clause in the by-laws, in the absence of which the majority of Italian scholars interpret the remainder of relevant provisions as banning such possibility).

As to the second category, we refer to the combined effect of, on the one hand, the policy option (adopted by the Italian legislator) not to indicate specific criteria or guidelines to help drafting the relevant clauses of the by-laws, and, on the other hand, the morphology of the Italian ownership structure, in respect of which, being many Italian listed companies still mainly guided by (individual or blocks of) controlling shareholder(s), they probably have little incentive to amend their by-laws in that respect, absent any regulatory obligations.

As to the last category, we refer to the uncertainty surrounding the effects on the validity of the decisions adopted by a shareholders' meeting affected by possible disservices and malfunctions concerning the activation and stability of remote connections and identification of the participants.

2. The impacts of the "Cura Italia" decree on the pre-existing regulatory framework

Before 2020, Italian law concerning the remote attendance to the shareholders' meetings – mainly resulting from a couple of major interventions in 2003 and 2010 – was essentially based on the following principles.

First, teleconference meetings were merely an option for both companies and their shareholders, as this possibility existed only to the extent it was expressly provided for in the by-laws. Conversely, said by-laws could never impose electronic instead of physical attendance.

Secondly, the legislator, simply limiting to allowing the aforesaid opportunity but refraining from dictating a more precise discipline, omitted to regulate important aspects of the remote attendance (in terms, for example, of calculating the relevant quorums of shareholders who would be physically "absent", but remotely "present"; of the validity of the decisions adopted in such meeting in the event of failure of the signal and/or the connection, and liability arising therefrom, if any). Due to the intrinsic difficulty and the uncertainty in drafting the specific clauses concerning such item, coupled with the risk of possible litigation, which companies had to face, this has ultimately ended up in discouraging their opt-in.

A third significant aspect, though not strictly related to the technological dimension of the attendance to their meeting by the shareholders (but which will turn out to be decisive in the subsequent emergency legislation), concerned the possibility for Italian listed companies to designate a representative (that is, the "*rappresentante designato*" pursuant to Section 135-*undecies* of the Italian Consolidated Law on Finance) to whom those shareholder who would prefer not to attend the meeting in person could have empowered (and duly instructed as to voting) this individual to participate and vote on their behalf.

In 2020, the "Cura Italia" decree introduced some significant innovations. More specifically, Section 106, paragraph 2, not only allowed all companies (including listed ones) to provide, in the call notice of the shareholders' meetings, even by way of derogation from their by-laws, the possibility to attend said meeting by means of telecommunication but has also authorized the use of such means on an exclusive basis, preventing any physical participation whatsoever. On the other hand, Section 106, paragraph 4 (dedicated only to listed companies), prescribed that attendance at the shareholders' meeting could take place exclusively through the (duly empowered, by means of appropriately granted proxies) "*rappresentante designato*" (pursuant to Section 135-*undecies* of the Italian Consolidated Law on Finance).

The implications of this emergency legislation – which however, due to the continuation of contagion risks, eventually turned into the "normally" applicable law for the last three years – are, at least, two-fold.

First, the centrality of the by-laws has been reduced, as it is mandated that the (different) legislative provisions prevail. At the same time (and as a consequence of the above), the competent decision-making body in respect of the technologization of the shareholders' meeting shifted towards the board of directors, as any decision in relation thereto was left to the call notice of the shareholders' meeting, which is typically an act under the responsibility of the directors.

Secondly, with specific regard to listed companies, the feeling is that the "Cura Italia" decree has realistically taken into account the fact that the imposition (although seemingly disguised by mere option) of virtuality would have been at least premature for most Italian companies and would have placed them at a serious risk of non-compliance. Therefore, although it may have deprived them of a unique opportunity for rapid modernization, forcing them to make an immediate technological leap forward to set up remote meetings, the legislator preferred to preserve a bulwark of physical presence in the meeting, "exhuming" an institution already present in our legal system, but actually very little used by issuers, *i.e.*, the "*rappresentante*

designato": then, the real novelty of the "Cura Italia" decree consists of the option for issuers to mandate, in the call notice of the shareholders' meeting, that participation in said meeting could only take place through the "*rappresentante designato*".

Therefore, if the pragmatism of the legislator must obviously be recognized, probably ascribing to it the merit of having allowed many shareholders' meetings of listed companies to be held, at the same time it cannot be overlooked that this took place "at the expenses" of many prerogatives of the shareholders in the meeting, which, with the method of "forced" delegation to the "*rappresentante designato*", suffered the maximum reduction: in fact, the most recurring ritual consisted in the reading of the resolution proposals by the chairman of the meeting, followed by the vote expressed by the "*rappresentante designato*", in the absence of any discussion of the items on the agenda, with an evident deviation from the physiological functioning of the meeting.

From a corporate governance perspective, even though the specific health emergency might have played a pivotal role, it is worth emphasizing that the choices of the legislator might lead to the conclusion that the technologization of the shareholders' meetings may (necessarily?) imply a significant lessening of shareholders' participation rights, other than voting.

3. The way forward

Ultimately, the emergency legislation significantly changed the pre-existing regulatory landscape in two main respects: first, it rebutted the "presumption of physicality" of shareholders' meetings; secondly, it "forced" shareholders to take part remotely to their meetings.

However, with regard to listed companies, this simpler regime did not enjoy the wide implementation that one could have expected in hindsight.

In light of such a failure, the following four remarks deserve to be emphasized.

First, the virtualization of shareholders' meetings in joint-stock companies – albeit with a significant dichotomy between closed and listed companies – is already a fact, even *de lege lata*. Indeed, the current legislative framework allows the "hybrid" meeting – that is, in which some shareholders are present in person in the place where the meeting is physically convened, while others are connected remotely, according to the indications received in the call notice – to be considered admissible; yet it can be easily predicted that in the next future this may represent the main method of organizing shareholders' meetings. To the extent the option to connect remotely is "additional" in re-

spect of that to physically attend the meeting, no coercion can be said to be imposed on the shareholders (so as to require their express consent): at that point, this solution (up to the extreme of a total remote participation of those entitled to attend the meeting) may tend to prevail in the medium term especially in closed companies – for which most of the "obstacles" mentioned above either do not arise *tout court* or are, in any case, compensated by a number of logistical and organizational advantages.

On the other hand, virtual-only shareholders' meetings cannot be considered currently admissible, in light of numerous existing legal provisions mainly interpreted such as postulating (or at least assuming) a necessary (even only partial) "physicality" of the meeting. However, this does not automatically mean that they cannot have *tout court* any right of citizenship in our legal system, especially under a *de iure condendo* perspective. Indeed, given that there are no real reasons for such ban, but only regulatory obstacles, having ascertained that the last three years have demonstrated that remote meetings are in fact almost equivalent to physical meetings, and without prejudice to the required legislative coordination (and adjustments), the current opt-in regime may be converted into an opt-out one, making the virtual shareholders' meeting as the default legal option, although waivable by individual companies.

Secondly, a next technological step, further propelling remote meetings, could be the use, on a large scale, of the blockchain technology. Indeed, if some of the main problems associated with the shareholders' meeting process are attributable to transparency (of the procedure), identification (of the shareholders entitled to attend) and verifiability (of the votes), blockchain appears to be helpful: the issuer could have a better knowledge of the identity of its shareholders; undoubted advantages in terms of time, costs, transparency and accuracy of the vote may be achieved; shareholders' participation may be encouraged and, therefore, more effective decision-making power may be exercised. Conversely, however, if it is good to place adequate expectations in the evolution of technology, we must not fall into the "*Tech Nirvana Fallacy*", that is, in short, the fideistic, perhaps naive, belief that new technologies can *de plano* solve traditional corporate governance issues. And in this case, the risk exists: in fact, it is yet to be demonstrated that accuracy and certainty of the votes, immediacy of intervention and voting, direct dialogue and absence of intermediation, while desirable *per se*, are elements capable of motivating, at least in part, rationally apathetic shareholders to participate to the meeting, overcoming their typical reluctance.

Thirdly, it is therefore necessary to ask whether, from a policy perspective, a greater opening of the legal system to virtual shareholders' meetings, especially in listed companies, corresponds to interests worthy of protection.

On this point, the possibility of remote attendance could represent an incentive to participate in the meetings especially for minor institutional investors and retail shareholders. This, in turn, may help pursuing the goal of increasing the degree of accountability of the agents (*i.e.*, directors) towards the principals (*i.e.*, shareholders), as a result of greater monitoring of the latter on the former. Therefore, the legislator's objective to remove as many "obstacles" as possible to electronic participation (and voting) can still be considered viable: as such, a possible way to pursue it, without necessarily passing through a new emergency legislation – in the event of a future resurgence of the pandemic, if any – which, being an emergency (as a synonym of "hasty") measure, would probably replicate the "defects" of the previous one[2], could be to resort, perhaps for a limited period of time, to a sort of regulatory sandbox, under the initiative of the competent Supervisory Authority. In this way, the right environment could be created for issuers to experiment, in terms of technological innovation, the new frontiers of remote participation, while shielding them from those risks mentioned above, which have probably represented the main reason for the resistance of Italian listed companies to virtual shareholders' meetings.

Lastly, especially in the event the path of enhancing virtual meetings is pursued, it would be crucial to questioning about the role of the shareholders' meeting in Italian listed companies. Indeed, if we assume that shareholders no longer meet there to dialectically discuss their respective initial voting intentions and express their vote on the main decisions submitted to them (by the board of directors), then the virtual meeting can even amplify the drift towards a metamorphosis of the assembly into an organ in which choices taken elsewhere are ratified and formalized. The feeling is that the more recourse to remote participation is strengthened, the more the prerogatives of shareholders other than the right to vote are weakened or, at least, are reshaped to be protected mainly outside the shareholders' meeting.

On the other hand, the experience of the shareholders' meetings of listed companies reveals that rarely – in specific circumstances or in relation to particular issuers – the meeting is where an effective debate takes place. Hence, the issue is whether to enhance the function of the meeting as dialectically mediating between multifaceted interests, which appears unrealistic and anachronistic, or, more radically, to modify the physiognomy of the decision-making process, providing for methods for adopting resolutions outside the meeting. In this sense, a possibility may contemplate a by-laws opt-out by the issuers to allow them to transform the shareholders' meeting

[2] That is what happened in 2023: see *supra*, nt. 1.

into a referendum-type mechanism, where the will of the participants, crystallized in the vote (expressed elsewhere), is ascertained.

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