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What is a circular economy champion? Defining a home-grown concept in an emerging field

Dolores Modic [a,b], Sahana Swaroop Chetan [a,*], Shajara Ul-Durar [c], Noman Arshed [d], Marco De Sisto [e], Nadja Damij [c]

[a] Nord University Business School, Nord University, Norway
[b] Rudolfovo, Science and Technology Centre, Novo Mesto, Slovenia
[c] University of Sunderland, Faculty of Business and Technology, Reg Vardy, St Peter's Campus, Sunderland, SR6 0DD, UK
[d] Department of Economics & Analytics, Sunway University, Kuala Lumpur, Malaysia
[e] School of Management, RMIT University, 445 Swanston Street, Melbourne, VIC, 3000, Australia

HIGHLIGHTS

- Advances CE theory by reducing ambiguity in actor-related terminology.
- Calls for the need for home-grown concepts in emerging fields.
- Proposes a novel concept: the Circular Economy Champion (CeC).
- Applies family resemblance and piecemeal methods for concept construction.
- Defines a Circular Economy Champion across traits, goals, and entity types.

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ABSTRACT

Circular economy, which aims to keep resources in production cycles and minimize waste, has emerged as a viable alternative to the traditional linear model. However, it is often criticized for being under-theorized and lacking indigenous, home-grown concepts, particularly regarding fundamental elements such as actors and actor types. This paper focuses on a specific actor: the circular economy champion. Circular economy champions can drive the transition toward a more circular economy, yet the concept remains under-conceptualized despite a growing body of literature. The aims of this study are twofold: first, to highlight the importance of home-grown concepts in emerging fields; and second, to address the ambiguity surrounding the terminology of "circular economy champion" by providing a novel conceptualization. The paper develops this concept using a family resemblance approach, employing differentiation criteria through a piecemeal method and underpinned by a theoretical review of the literature. By extending both the scope of actor types and, based on their traits, the range of their attributes, activities, and contributions to the circular economy, the concept of the circular economy champion is further delineated from related constructs and firmly defined. This contributes to circular economy discourse by proposing a novel definition of a key actor within the circular economy system, thus strengthening its theoretical foundations. Moreover, the proposed definition reduces ambiguity in understanding actors' roles within the circular economy, further clarifying its microfoundations.

1. Introduction

The World Economic Forum recognized the European Commission as a champion in the circular economy (CE) in 2019 (EC, 2019), and the then president of the European Investment Bank delivered a speech in 2021 entitled the "CE Champions Commitments" (EIB, 2021). Circular economy champions (CeC) have been hence frequently featured in expert debates as drivers of circular transition (Walker et al., 2022) and

* Corresponding author.
E-mail addresses: dolores.modic@nord.no (D. Modic), sahana.s.chetan@nord.no (S.S. Chetan), Shajara.ul-durar@sunderland.ac.uk (S. Ul-Durar), nomana@sunway.edu.my (N. Arshed), marco.desisto@rmit.edu.au (M. De Sisto), Nadja.damij@sunderland.ac.uk (N. Damij).

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increasingly present in policy discourse (Pinyol Alberich and Hartley, 2024). They also appear in practice, for e.g., introducing awards under CeC-related labels (Pitkänen et al., 2023; BGB, 2021; Van Wassenhove, 2019). The term has been additionally gaining traction in academic literature (Bosman, 2021; Puntillo et al., 2021; Roberts et al., 2021). Yet, its definition and conceptual basis remained vague, highlighting there is a clear need for stronger theorization in CE, in addition to CeC holding promise in advancing the CE transition (Van Wassenhove, 2019; Urbinati et al., 2017, 2018).

Today, CE replaced linear 'take, make, dispose' models, with alternative focus on keeping resources in production cycles and minimising waste (Chizaryfard et al., 2021; Korhonen et al., 2018a). Criticisms of CE include its lack of conceptual rigidity, i.e. unclear theoretical grounds (Corvellec et al., 2022; Korhonen et al., 2018b), and call for more theoretical contributions (Mignacca et al., 2025). Contributing to CE's shift from emerging to mature field (Džajić Uršič et al., 2023b, 2024), the call also relates to rigorously defined *concepts* that lend a common meaning (Ehrenfeld, 2004), wherein the value of so-called *indigenous or home-grown concepts* (Ulaga et al., 2021) should be recognized. Nonetheless, CE literature remains mostly silent, especially relating to one of the core elements, the *actors* inside CE.

Development of CE requires involvement of various *actors* with a broad spectrum of interests, including enterprises (Fobbe and Hilletofth, 2023), governments, non-profit organisations (Kaipainen et al., 2023), and local communities (Rincón-Moreno et al., 2022). Such participation is essential for successful implementation of CE initiatives. While a transformative and sustainable CE needs a range of diverse actors, it also requires specific actors (Rainville, 2021); including actors that are the focal point of this article: *the CeC*.

The contributions of this paper were twofold. Firstly, it highlights the value of indigenous, home-grown concepts in emerging fields such as CE. Secondly (and more importantly), it defines and refines the concept of a CeC, building upon the initial yet limited definition proposed by Bosman (2021). Acknowledging that a rigorous theoretical review is an essential starting point for capturing the knowledge base of any concept (Paré et al., 2015), provided definition of CeC extends both the scope of actor types and, based on their traits, the range of associated attributes, activities, and potential impact on the CE. This is achieved through a piecemeal approach (Podsakoff et al., 2016), combined with principles of conceptual modelling (Thalheim, 2011), and guided by Gerring's (1999) criteria for conceptual adequacy during the construction phase and Howie and Bagnall's (2020) evaluation criteria in the assessment phase. Hence, we contributed to the theoretical development of CE by offering a clear and distinct definition of a key system actor - addressing a gap in an otherwise under-theorized and emerging field.

2. Background

2.1. The need for home-grown concepts in emerging fields

CE has recently been recognized as an emerging field (Kirchherr et al., 2023a), based on Ehrenfeld (2004) four criteria for defining a scholarly field, with shared *concepts* being the first. Despite its rapid proliferation in the literature (Džajić Uršič et al., 2024), CE remains in a nascent stage of theoretical development (Mignacca et al., 2025). The multitude of CE definitions highlight both its potential and immaturity (Kirchherr et al., 2023a; 2023b), with scarcity of conceptual papers limiting indigenous theory building (Yadav, 2014).

Critics noted CE's conceptual fuzziness (Corvellec et al., 2022; Korhonen et al., 2018b), making it essential to develop novel 'home--grown' concepts (Ulaga et al., 2021). Scholars must identify and define these indigenous concepts in terms of breadth and depth to advance CE's theoretical foundation. Previous attempts at defining key CE concepts (Kirchherr et al., 2023b) can be noticed, with some of these concepts seen as building "a set of foundational beliefs" (Ehrenfeld, 2004: 826), such as the concept of 'reducing' or 'circular business models'.

Defining key CE concepts strengthens the field and bridges the theory-practice gap. The paper directly responds to the recent calls for more theorizing in CE research, where Mignacca et al. (2025: 2) define CE theory as "a set of *concepts* and their interrelationships showing how and/or why CE practices are observed or are expected to be observed." Both field establishment and theory development require robust conceptualization.

A *concept* represents an abstract mental construct that underpins theory. Concepts function as interpretative approaches to social reality (Jabareen, 2009) rather than causal/analytical settings. They embody units of meaning that summarize specific aspects of phenomena (Rodgers and Knafl, 2000), and serve as cognitive symbols distinguishing a phenomenon from related phenomena (Podsakoff et al., 2016). Concepts form the foundation of theoretical frameworks, Maxwell (2013) and Kaplan (1964) noting that sound theory requires proper concepts. Concepts further provide the necessary structure for analysis and interpretation (Maxwell, 2013), with their clarity and contextual relevance being essential for effective scholarly application (Ravitch and Riggan, 2016).

More broadly, concepts construct the theoretical 'what' (Whetten, 1989), even as "products of the theorizing process seldom emerge as full-blown theories" (Weick, 1995:385). Concepts become powerful building blocks of theory when accompanied by logic explaining why they "come about or why they are connected" (Sutton and Staw, 1995: 375).

Within CE theory, *actors* are central to the CE formation (Fobbe and Hilletofth, 2023; Conduit et al., 2023; Kaipainen et al., 2023) and should be considered as one of 'fundamental beliefs' (Kirchherr et al., 2023a; Rincón-Moreno et al., 2022; Suchek et al., 2021).

This raises the question of *which actors* should be considered. Emergent fields such as CE, often struggle with overlapping concepts related to actors or unclear boundaries between actor roles (Ehrenfeld, 2004). While CeC appears both in practice and research it overlaps with related terms such as 'leaders', 'frontrunners', within the CE and in nearby-fields, creating a nomological puzzle. This confusion further emphasizes the need to clearly define the home-grown concept of CeC.

Home-grown concepts help delineate emerging fields by establishing core theoretical building blocks. Developing new (organic) theories requires the ideation of indigenous or home-grown concepts, with well-defined boundaries and clear relationships within the existing nomological network (Ulaga et al., 2021).

Articulating the precise CeC definition, allows for a refined CE discourse by reducing ambiguity in actors' roles, thereby contributing to the field's theoretical foundations. This clarification builds a basis for exploring CE's micro-foundations and may benefit adjacent fields struggling with similar nomological uncertainties surrounding actor-related concepts. The positive effects of such conceptual clarity could extend beyond CE, strengthening nearby fields that face similar challenges in defining key actors and their roles.

3. Research method

Fundamentally the paper follows Podsakoff et al. (2016) defining a concept as a cognitive symbol that specifies features in the real or phenomenological world that they are meant to represent and with features distinguishing them from related phenomena. In order to be able to build the concept taking into account the conceptual adequacy criteria (Gerring, 1999), the concept is developed through the family resemblance approach (Podsakoff et al., 2016), i.e., focusing on Gerring's (1999) differentiation criteria (apart from other conceptual adequacy criteria: familiarity, resonance, scope, parsimony and coherence, depth and two types of utility, theoretical and field utility).

While introducing a new 'indigenous' type of circular economy actor, i.e. a new home-grown (Ulaga et al., 2021) concept, the paper first reflects on how this concept relates to the nomological net of existing concepts (Podsakoff et al., 2016). This allows properly positioning this

new CeC concept with respect to extant theorizing (Ulaga et al., 2021).

Furthermore, when analysing the borders between the concepts (represented in Fig. 1 as X, Y, Z), this was done in a relatively piecemeal fashion (i.e. invoking one or the other property, in the figure represented as P1, P2, P3, …Pn), while still allowing for a strong conceptual approach. Piecemeal fashion refers to an approach where a complex phenomenon - e.g., the border between concepts - is examined by isolating and analyzing individual components or properties rather than evaluating the entire construct in a single, integrated analysis. This method allows researchers to incrementally identify, compare, and refine the defining attributes of each concept, which can then be synthesized into a comprehensive theoretical framework (Miles et al., 2014). Such an approach also facilitates the detection of subtle nuances and discontinuities between concepts, offering a granular understanding of their interrelationships (Sandberg and Tsoukas, 2015).

In line with the theory and foundations of conceptual modelling (Thalheim, 2011), we have chosen three key properties: Entity Scope (P1), Attribute/Activity (P2) and Goal (P3). Initially the paper articulated the relationship between the application domain world and the modelling language world. To do so, it is essential to first understand the 'entity' used to define the concept – hence our first property, P1, is entity scope.

Next, the focus is on the relationship between various functional dependencies that comprise a concept, looking at the attributes or activities that exist within those dependencies, i.e. selecting 'attribute/activity' as the next property, P2. Lastly, the conceptual model definition must encompass all forms of conceptual model description extending beyond the textual or narrative form. While defining and subsequently delineating the concept of CeC one needs to understand clearly the goals attributed to the concept – hence the final property, P3.

The paper relied on the relatively meagre literature on CeC, and literature related to similar concepts, proceeded with a theoretical literature review (see Appendix 1 for more information about the literature review), focusing on the above three properties. Paré et al. (2015: 188) describe theoretical reviews, as drawing on existing conceptual and empirical studies "to provide a context for identifying, describing, and transforming into a higher order of theoretical structure and various concepts, constructs or relationships". Primary contribution and value of a theoretical review is thus the basis to develop novel conceptualizations (Webster and Watson, 2002).

4.1. Delineating and defining the concept of circular economy champions

4.1.1. Types of actors: the delineation

The initial classification uncovers three groups of relevant actor types: general actors (such as change agents or policy entrepreneurs), environmental and green actors (e.g., environmental leaders or green champions) and actors more specifically linked to CE (see Fig. 2).

Similar concepts to the CeC concept are often embedded in the innovation literature, e.g., 'an environmental leader' (Taylor et al., 2011, 2012) or 'a green champion' (Gliedt et al., 2018; Hull et al., 2021), with the former referred to as an agent who triggers and drives change in response to complex environmental challenges (Taylor et al., 2012).

Another important perspective is found in the dynamic capabilities literature, which highlights how entities "integrate, build, and reconfigure internal and external competencies to address rapidly changing environments" (Teece, 2007). Foss et al. (2023) expand on this by discussing ecosystem leadership and ecosystem leaders, who may be organisations or individuals, emphasizing that ecosystem leadership entails dynamic capabilities related to solving ecosystem-wide coordination and cooperation challenges. Dynamically capable leaders can sense and adapt to internal and external changes.

Related terms also appear in transitions literature, where coordination problems and the subsequent need for orchestration are common themes (Hurmelinna-Laukkanen et al., 2022). Cramer (2020) introduced the notion of a transition broker, someone who orchestrates the process from linear to CE models. Similarly, the transition management literature discusses 'frontrunners', which are various types of organisations seen as pioneers, innovators and niche players (Loorbach et al., 2015).

The corporate sustainability literature also influences how intermediaries are defined, particularly leaders who initiate and drive more sustainable practices, policies, and cultures within organisations (Taylor et al., 2012), such as change agents (Dunphy et al., 2007). In public procurement literature, the concept of a champion has been extended to circular public procurement (Rainville, 2021), typically referring to individuals, similar to policy entrepreneurs, described as "highly talented and exceptional bureaucrats, who, just like their private counterparts, are constantly on the alert for new opportunities (for policy change) and have the capacity to 'sell' and 'market' new ideas" (Brouwer and Huitema, 2018, p. 1259).

Several other roles directly connected to the CE field have emerged. Khan et al. (2022) refer to CE advocates or supporters, often linking them particularly to digital technologies. Stahel (2020) mentioned the term pioneers or early adopters of circularity, while Heshmati (2017) coined the term 'circular economy enthusiasts' based on their passion for advancing CE by motivating others, i.e. entrepreneurs or regulators, to adopt circularity. Metcalf and Hinske (2022) used the term circular economy leaders based on their role in the adoption of CE practices and Nurminen et al. (2024) looked at self-declared CE frontrunners' reluctance to align with macro-level CE goals.

As defined above, the piecemeal synthesization focuses on P1 (Entity type), P2 Attribute or Activity), and P3 (Goal). For P1, entities are sometimes defined narrowly (limited to only organisations or individuals (compare Loorbach et al. with Rainville, 2021), or more broadly as encompassing both (e.g., Foss et al., 2023). Scope can be further constrained to a single sector (private or public, e.g., Brouwer and Huitema, 2018), or more broadly across sectors.

In terms of P2, entities may be defined solely by their activities (e.g.,

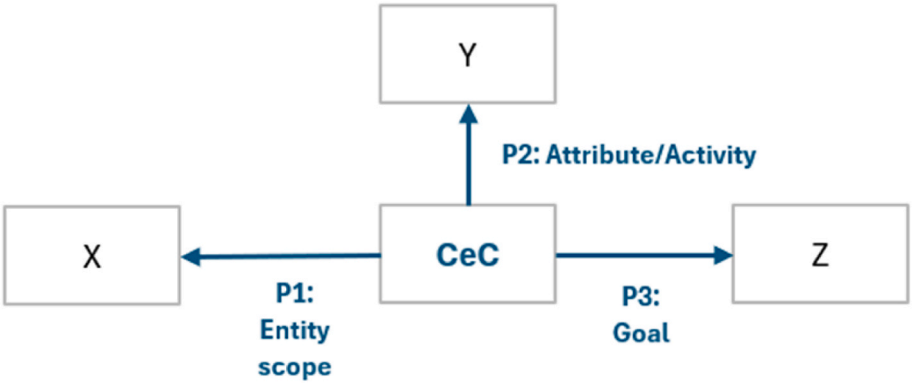

Fig. 1. Conceptual delineation model for CeC based on the three selected properties.

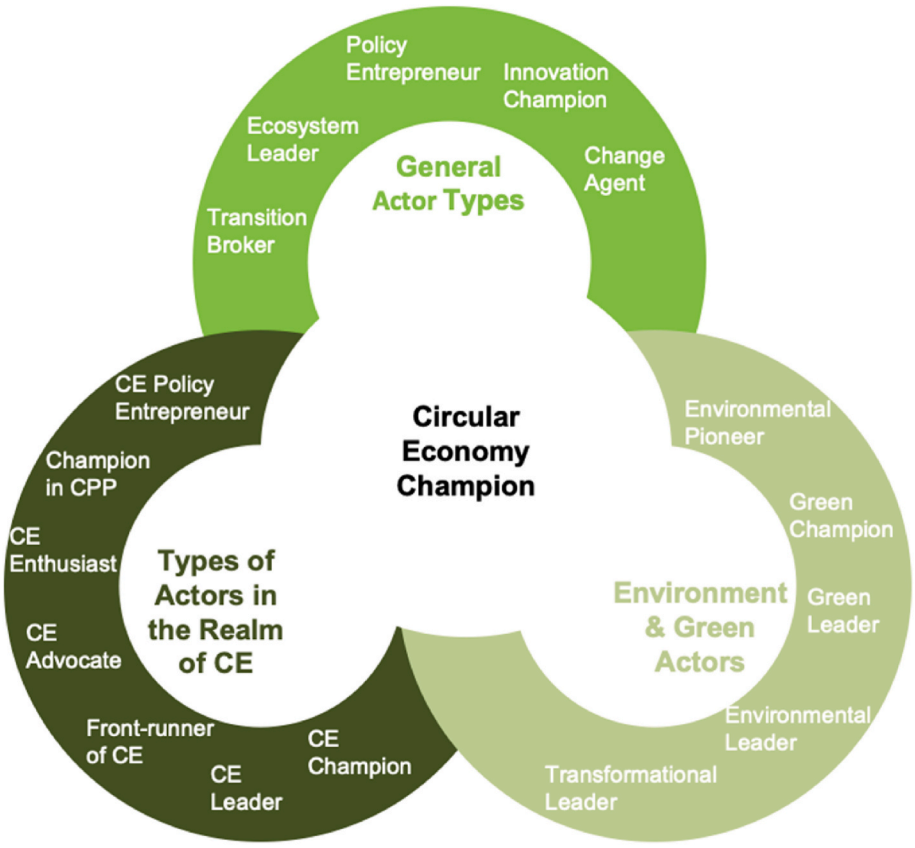

Fig. 2. Three groups of relevant actor types as they relate to CE.

Kumar et al., 2023; Begum et al., 2022), or by both activities and attributes (e.g., Metcalf and Hinske, 2022). Sometimes, actions and attributes are supplemented by context-specific factors (Taylor et al., 2011, 2012). Many definitions focus on particular actions (such as orchestration or awareness-raising), which alone may not fully represent the activities expected from such entities. Consequently, existing definitions often do not capture the full scope of these roles.

In terms of P3, concepts within the sustainability and CE space sometimes encompass broader scopes (for example, transition brokers by Cramer, 2020, 2023, or change agents by Dunphy et al., 2007). The nature of the goal orientation (P3) is thus constrained or broadened depending on the conceptual boundaries applied.

4.1.2. *The properties of a circular economy champion*

CE is described as an essentially contested concept (Korhonen et al., 2018b), following Gallie's (1956) definition. Similarly, CeC has also been seen as such. While there is general agreement on the means and goals, there remains disagreement regarding the conceptual cornerstones, particularly its definition. The concept remains largely a-theoretical, much like that of ecosystem leaders (Foss et al., 2023). This is despite the proliferation of the CeC term in the real world, academic literature, and policy frameworks (Puntillo et al., 2021; Roberts et al., 2021; Urbinati et al., 2018), as well as its apparent significant contribution to sustainability (Khanna et al., 2022; Van Wassenhove, 2019). The paper posits that CeC play an essential role in driving change (Taylor et al., 2012; Loorbach et al., 2015).

Acknowledging that "developing a concept is more than providing a definition; it is deciding what is important for an entity" (Goertz, 2006:26), this paper defines the concept through the properties outlined above, focusing on how the literature has utilized the term thus far and analyzing related concepts. Notably, Bosman (2021) provided an early attempt at conceptualization, suggesting that a champion in the context of CE should encompass at least two components: (a) knowledgeability about CE and (b) the capacity to enact influence. However, this definition warrants further strengthening; for example, alongside the "power to influence", there must also be a "willingness" to do so. Additionally, Bosman's (2021) definition pertains to individuals, yet this scope remains insufficient.

4.1.2.1. *The breadth of CeC.*

In terms of entity manifestations (P1), individuals and organisations of various types, ranging from companies to cities, have already been recognized as fulfilling the role of circular champions (Ramakrishna et al., 2020; Puntillo et al., 2021; Gusmerotti et al., 2019). In Bosman's (2021) initial conceptualization, organisations were not included as CeC.

The definition of CeC, however, should encompass both organisations and individuals. Moreover, additional types or combinations of entities that could be considered as CeC have also been identified (Kelemen and Vogel, 2010), thereby introducing the notion of what might be termed 'configurations'.

4.1.2.2. *The traits of a CeC.*

The focus on traits of a CeC (P2) relies on CE literature, building upon notions presented by Bosman (2021) and incorporating broader understandings of closely related terms.

In terms of *knowledgeability about CE,* a champion must be knowledgeable about the principles of CE (Radicle, 2021) and understand CE strategies, such as alternative approaches including concentrating on shorter-loop and high-value retention choices, i.e. remanufacturing, repurposing, and refurbishing, as well as optimising resource use (Reike et al., 2018; Bosman, 2021). Knowledge of regenerative practices, resource conservation and increasing demand for resource efficiency is also important, since CeC can also accelerate the transition towards circularity by driving (internal and external) demand for resource efficiency (Rainville, 2021).

Enacting influence and awareness raising, i.e. *enacting advocacy* bridges citizen aspirations, industry capabilities, and governmental action (CEA, 2023), enabling systemic change both locally and globally. CeC (policy) advocacy establishes norms and encourages innovation, since businesses are more willing to explore new areas when regulations support circular practices (CEA, 2023). This advocacy increases alertness to new opportunities and a willingness to take calculated risks (Brouwer and Huitema, 2018). The CeC's influence typically stems from expertise rather than formal hierarchy (Taylor et al., 2012), often serving as an inspiration for others to adopt CE practices (WEF, 2022).

CeC trait is to demonstrate the implementation of CE principles (Rodríguez-Antón et al., 2022), i.e. taking on an *action-oriented approach*. Numerous case studies highlight CE implementation stories, showing how governments, businesses, and cities are transforming the economy to benefit people and the environment (Ellen Macarthur Foundation, 2025). CeC integrate CE principles into their business, and support their integration in other organisations and the supply chain (Nyffenegger et al., 2024). This contrasts with some self-declared CE frontrunners, who only superficially align with CE principles (Nurminen et al., 2024). CeC also facilitate retention of value and utility of stocks and assets as long as possible (Metcalf and Hinske, 2022), support systemic change with finance acquisition (Ul-Durar et al., 2023), and provide toolkits for implementation (Ellen Macarthur Foundation, 2018).

Leadership, collaboration and orchestration means CeC lead by example, integrating CE principles into operations (StartUs Insights, 2023). Companies like Adidas and IKEA illustrate that profitable business models can also be sustainable by designing products for recycling and implementing buy-back schemes (WEF, 2020). While not always occupying formal leadership roles (Pitkänen et al., 2023), individual champions often display strong leadership qualities (Taylor et al., 2012). Theories of human behaviour (agency theory; social exchange theory) highlight motivations for responsible action and in the long-term stewardship, portraying CeC as intrinsically motivated stewards of resources (Bosman, 2021; Conduit et al., 2023). Literature points to passion as a distinguishing attribute (Heshmati, 2017; Sohal and De Vass, 2022), and recent shifts emphasize environmental stewardship as a key skill (WEF, 2025).

Achieving CE requires collaboration among diverse stakeholders (Kaipainen et al., 2023; Oberholzer and Sachs, 2023). In the socio-technical ecosystem context, these stakeholders collectively pursue the overarching goal of systems-level circularity. CeC foster this collaboration by actively engaging stakeholders in CE ecosystems (Kaipainen et al., 2023) and facilitating effective collaborative processes between organisations, addressing significant orchestration challenges. CeC have thus adopted traits of transition brokers, orchestrating both the process (learning and communication) and the content (providing new information and seeking and implementing ambitious solutions for the CE transition) (Cramer, 2020, 2023).

CeC demonstrates *dynamic capabilities,* compliant with Teece's (2007) original definition: sensing, seizing, and reconfiguring capacities. Amidst intricate societal shifts towards CE, organisations and individuals must cultivate capabilities aligned with CE principles (Mousavi et al., 2018). CeC showcase adaptability and flexibility, standing at the forefront of innovative solutions, effective knowledge management, and stakeholder engagement (Bag and Rahman, 2023; Khan et al., 2020; Scarpellini et al., 2020). Therewith CeC encourages the formation of a shared vision and fosters engagement of stakeholders to take action towards CE transformation (Foss et al., 2023).

4.1.2.3. Impact of CeC on circular economy. Looking through the lens of essentially contested concepts (Gallie, 1956), the property of goal (i.e. CeC impact on CE, P3) should, by definition, be the least contested one. Yet, it is one of the key properties that must be diligently defined using a piecemeal approach. The paper focuses on CeC impact on CE: driving innovation, influencing policies, building collaborative networks and their orchestration, recognizing and rewarding relevant CE actors.

CeC are at the forefront of *driving CE innovation* (Dedehayir et al., 2018; Liefferink and Wurzel, 2017; Metcalf and Hinske, 2022), engaging in a wide range of potential types related to high value retention strategies. These strategies are critical for CE development and encompass e.g., technical, business model, and systemic innovation (Jakobsen et al., 2021; Modic et al., 2021; Molden et al., 2025). *Inter alia*, CeC supports the creation of the circular business models (WEF, 2022) and lead the integration of digital advances within CE initiatives (Khan et al., 2022).

CeC also indirectly impact the CE transition by serving as knowledge hubs and by bolstering the acquisition of circular economy skills and competences. This supports ideation and disseminates best practices that accelerate the CE transition (Bocken et al., 2016). By mentoring the next generation, CeC help equip them with skills needed to implement circular innovations, evident in initiatives connecting experts with startups to promote circular practices (CEC, 2023). They also contribute to innovating CE microcosms, deploying CE innovations while integrating CE principles (Korhonen et al., 2018a).

CeC *influence policies*, which are critical for scaling up economic circular action. Effective policies help businesses to overcome obstacles by fostering innovation and long-term investments in circularity, facilitating collaboration, and producing measurable results (WBCSD, 2019). CeC leverage their policy expertise to engage with policymakers and to advocate for supportive legislation, recognizing that robust regulatory frameworks rely on well-designed, effectively implemented, and enforced regulations (WBCSD, 2019; Kazancoglu et al., 2021). Similarly to green champions, CeC can be seen as policy entrepreneurs who contribute to green development strategies (Gliedt et al., 2018; Hull et al., 2021) by co-creating policies that incentivize circular practices, including circular public procurement, and waste management policies.

CeC help *build and orchestrate collaborative networks* in multiple forms. They form partnerships with industry to drive innovation, develop commercial solutions, and scale up circularity (WEF, 2023). In addition, CeC collaborate with governments at the global level to advocate for a just CE transition (UNEP, 2021) This involves building coalitions with partners, thereby improving system-level circularity (Kaipainen et al., 2023). CeC can also develop knowledge exchange platforms to accelerate the CE transition (CEF, 2021), and use data-driven insights to improve decision making and facilitate collaboration.

CeC frequently recognize and reward businesses and individuals committed to circular practices, thus aiding in *signalling and awareness raising for CE* and *fostering the culture* of circularity and sustainability (e.g., CEF, 2021; Rainville, 2021). Albeit recognition can take various forms, attention in both practice and literature has focused on awards, certifications, or other acknowledgments-encouraging positive reinforcement of circular behaviours (Puntillo et al., 2021; Roberts et al., 2021). The Circulars (2024), the World Economic Forum initiative, offers recognition to individuals and organisations that have made a notable impact in driving CE principles, while The Circle Awards (Sutherland, 2022) offer recognition to individuals and organisations that have made a notable impact on CE practices.

5. Discussion

5.1. An attempt at CeC synthesis

The paper synthesises our understanding of CeC by drawing on the broad scope of the CeC concept, encompassing a wide array of entities. Furthermore, it builds on our understanding of CeC traits, namely activities and attributes, which empower CeC to contribute to an impactful CE, and facilitating the CE transition. Fig. 3 provides an overview.

In essence: CeC are individuals, organisations or hybrid configurations thereof that demonstrate specific traits, including knowledgeability about CE, advocacy enactment, an action-oriented approach, leadership, collaboration, orchestration, and dynamic capabilities;

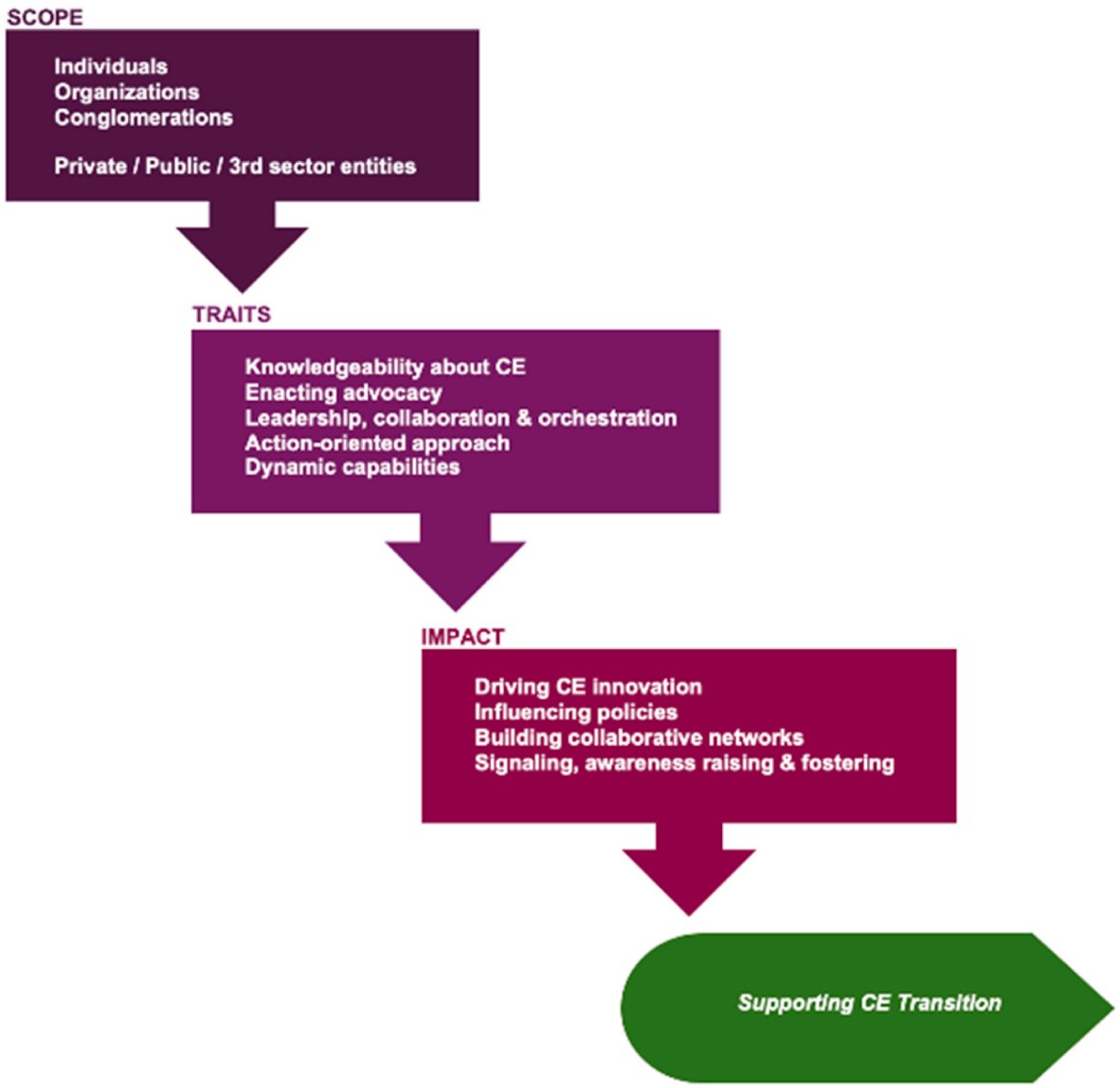

Fig. 3. Synthesized concept of CeC including scope, traits and impact.

empowering CeC to contribute to the advancement of CE by driving innovation within the CE domain, influencing policies, establishing and orchestrating collaborative networks, as well as signalling, raising awareness, and fostering a culture conducive to CE principles.

5.2. *Evaluating the concept*

For evaluating the concept Howie and Bagnall's (2020) eight criteria across three categories was used: intrinsic qualities (the criteria of resonance, clarity, comprehensiveness, and parsimony), contextualization (differentiation and connectedness), and application (epistemic utility and practical utility).

For intrinsic qualities, resonance (Howie and Bagnall, 2020) is addressed through familiarity. As Durkheim (1895) noted, "in actual practices, one always starts with the lay concept and the lay term". Taking into account gray literature sources, the paper designed a "catchy, memorable, … and appealing in and of itself" concept (Howie and Bagnall, 2020:730). The developed definition is logically structured, congruent in terms of complementarity from supplementary concepts and explicated through a theoretically straightforward manner (achieving clarity). The definition uses no surplus of descriptive elements (parsimony). The latter was achieved with an iterative approach when deducing and later aggregating the sources, and the piecemeal approach (Miles et al., 2014; Sandberg and Tsoukas, 2015) used ensured comprehensiveness by addressing a complete and conclusive set of referents.

Contextualization is addressed both by differentiation and connectedness. Differentiation establishes conceptual boundaries (Dubin, 1978) between our concept and similar ones in CE and sustainability. Sartori (1984) argues that a concept needs to be a part of a semantic field, which is a wider understanding of connectedness by Howie and Bagnall (2020), and borders on field utility.

Regarding the set of criteria related to application, i.e., epistemic (i.e. theoretical) and practical utility, for application utility, as Gerring (1999: 381) noted, "the scientific goal of concepts is to aid in the formalization of theories". CE literature reviews (Kirrcher et al., 2017; 2023) connect definitions to actions rather than actors. But actions need actors to drive them, give them meaning and purpose. Recent literature emphasizes actors' importance in driving circularity transitions (Fobbe and Hilletofth, 2023; Conduit et al., 2023; Kaipainen et al., 2023), which is consequently highlighting the need to address the 'emptiness' of actor-related concepts for CE theory building (Kirchherr et al., 2023a; Rincón-Moreno et al., 2022).

Regarding practical (or field) utility, Howie and Bagnall's (2020)

connected this to usefulness (to professional or administrative practice), practicality (as provisions to guide practice) and importance (acceptability by practitioners). Building on Durkheim's approach, 'circular economy champion' has emerged from practice and already enjoys practitioners' acceptance, demonstrating its field utility.

6. Conclusion

The aim of this paper was twofold. First, the paper aimed to highlight the need for indigenous, home-grown (Ulaga et al., 2021) concepts within emerging fields like CE, which are often criticized for their theoretical ambiguity. Developing a more rigorous understanding of key CE concepts, particularly CeC, helps move the field beyond the realm of "essentially contested concepts" (Korhonen et al., 2018b; Gallie, 1956).

The second aim was to address the ambiguity of the CeC terminology by providing a novel conceptualization thereof. The paper developed the CeC concept using the family resemblance approach, focusing on differentiation criteria using a piecemeal approach. This allowed for a synthesis of diverse literature streams, distinguishing CeC from related concepts, and proposing a comprehensive definition. This thereby contributes to the theoretical underpinnings of CE and clarifies its micro foundations. In doing so, the paper responded to the call for more theorizing in the CE domain (Mignacca et al., 2025), and addressed the broader issue of conceptual vagueness surrounding CE actors and their overlapping roles.

Next, by positioning the CeC within the broader nomological net of related concepts, the study lays the groundwork for future empirical inquiry and theory building in the CE domain. Ultimately, the conceptual framework not only clarifies the microfoundations of CE practices but also acts as a stepping-stone toward more integrative models of sustainable transformation.

However, the applied research approach is not without limitations. The primary limitation relates to the purely theoretical nature of our concept development. While the conceptualization was grounded in existing literature and theoretical frameworks, empirical validation is needed to further refine the concept and enhance its robustness. Future research should empirically test the CeC definition through case studies, surveys, or other methods to assess its traits and relevance across different contexts.

Moreover, while the developed definition offers stability across time and contexts, there is a need to develop specific typologies or taxonomies. Future research could develop a more nuanced typology of CeC, identifying different types of champions based on their specific traits, contexts, or contributions. This could also be tackled by using alternative approaches to the one presented in the paper, such as grounded theory. For instance, researchers might investigate whether there are meaningful distinctions between individual and organisational champions, or between champions in different sectors or geographical contexts. Such taxonomic development would enhance the applicability of the concept in diverse settings and provide more targeted insights for practitioners.

Furthermore, operationalizing this concept and measuring its veracity is also important. For example, CeC might be assessed through criteria such as: a) firm behavior, where formal frameworks are used to measure whether an organization is indeed a CeC, assessing the company's overall CE performance across various dimensions (inputs, outputs, design, business model, enablers, outcomes), and consequently use benchmarks such as circular transition indicators (CTI) and material circularity indicators (MCI); b) leadership behavior: demonstration of advocacy for CE within, examining for example the relationship between the champion and the team, e.g. through applying Leader-Member Exchange (LMX) frameworks (Liden et al., 1997) or beyond their organization (e.g., through CE strategies or initiatives). Also, individual and team level key performance and resource area indicators can be used to determine the leader/employee behaviors; c) implementation metrics or impact metrics: e.g. for the former looking into the number and scope of circular practices implemented (e.g., closed-loop systems, resource efficiency gains); or investigating the degree to which their actions led to systemic change (e.g., policy shifts, value chain transformation); or d) position in the network, influence and/or recognition: using awards or other external rewards indications, or looking into network centrality in CE ecosystems.

Additionally, future research could explore the relationships between CeC and other actors in the CE ecosystem, investigating how champions interact with other stakeholders and how these interactions influence the transition to CE. Another promising avenue would be to examine the developmental trajectories of champions, i.e., how individuals or organisations become CeC and how their roles evolve over time. This temporal dimension would add depth to our understanding of the dynamic nature of champions in driving CE transitions.

Albeit conceptual in nature, this work still has implications for practice, aligned with Ehrenfeld's (2004: 826) understanding that concepts should also be able to "guide practitioners in their everyday, normal activities". In this line, the work signals the multi-dimensionality of CeC. For example, while rewarding champions, multiple criteria should be developed and taken into consideration. Recognizing the scope and breadth of champions can also help organisations design more effective support mechanisms, incentive structures, and evaluation frameworks that align with CE goals in practice. However, continued efforts in theorizing within the CE field are essential; thus, encouraging future work that develops CE theory by consolidating emerging concepts like CeC into broader theoretical frameworks.

CRediT authorship contribution statement

Dolores Modic: Writing – review & editing, Writing – original draft, Visualization, Supervision, Methodology, Investigation, Conceptualization. **Sahana Swaroop Chetan:** Writing – review & editing, Writing – original draft, Methodology, Investigation, Formal analysis, Conceptualization. **Shajara Ul-Durar:** Writing – review & editing, Validation. **Noman Arshed:** Writing – review & editing, Writing – original draft. **Marco De Sisto:** Writing – review & editing, Writing – original draft. **Nadja Damij:** Writing – review & editing, Writing – original draft, Visualization, Validation, Methodology, Investigation, Formal analysis, Conceptualization.

Declaration of competing interest

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

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jclepro.2025.146408.

Appendix 1

The query was related to both CE champions as well as to the groups of general types of actors, environmental and green actors. The data was derived from Web of Science, Scopus and IEEE databases, and also includes some selected hand curated articles, and we also take into account diligently selected related reports from reputable organisations in the field. Our search in the databases was limited to articles only, and the period 2000–2024, excluding also some non-relevant areas of research. Figure i. outlines the PRISMA report for our analysis.

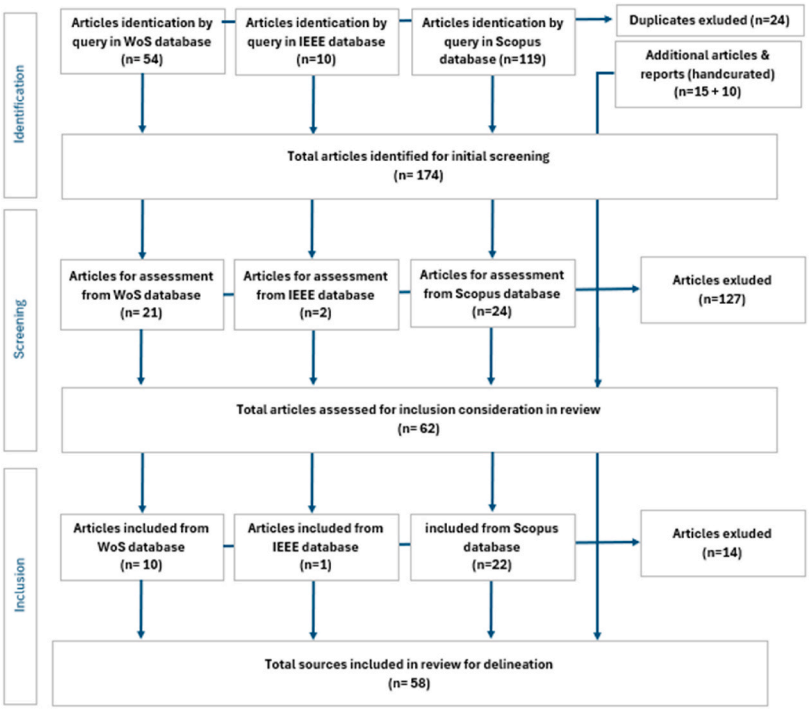

Fig. i. PRISMA.

Web of Science Search Query:

(TI=("Circular economy champion" OR "Circular economy advocate" OR "Circular economy enthusiast" OR "Circular economy leader"OR "Green champion" OR "Green leader" OR "Environmental leader" OR "Ecosystem leader" OR ("Change agent" AND "circular economy"))) OR (AB=("Circular economy champion" OR "Circular economy advocate" OR "Circular economy enthusiast" OR "Circular economy leader"OR "Green champion" OR "Green leader" OR "Environmental leader" OR "Ecosystem leader" OR ("Change agent" AND "circular economy"))) OR (AK=("Circular economy champion" OR "Circular economy advocate" OR "Circular economy enthusiast" OR "Circular economy leader" OR "Green champion" OR "Green leader" OR "Environmental leader" OR "Ecosystem leader" OR ("Change agent" AND "circular economy")))

Scopus Search Query:

TITLE-ABS ("Environmental leader" OR "Circular economy advocate" OR "Circular economy enthusiast" OR "Circular economy leader" OR "Green champion" OR "Green leader" OR "Environmental leader" OR "Ecosystem leader" OR ("Change agent" AND "circular economy") OR ("Transition broker" AND "circular economy") OR ("Policy entrepreneur" AND "circular economy") OR ("Frontrunner" AND "circular economy")) AND PUBYEAR > 1999 AND PUBYEAR < 2025 AND (EXCLUDE (SUBJAREA , "ENER") OR EXCLUDE (SUBJAREA , "ENGI") OR EXCLUDE (SUBJAREA , "MATH") OR EXCLUDE (SUBJAREA , "COMP") OR EXCLUDE (SUBJAREA , "AGRI") OR EXCLUDE (SUBJAREA , "ARTS") OR EXCLUDE (SUBJAREA , "PSYC") OR EXCLUDE (SUBJAREA , "BIOC") OR EXCLUDE (SUBJAREA , "NEUR") OR EXCLUDE (SUBJAREA , "IMMU") OR EXCLUDE (SUBJAREA , "MEDI") OR EXCLUDE (SUBJAREA , "MATE") OR EXCLUDE (SUBJAREA , "HEAL") OR EXCLUDE (SUBJAREA , "CENG")) AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (SRCTYPE , "j"))

IEEE Search Query:

("All Metadata":Circular economy champion) OR ("All Metadata":Circular economy advocate) OR ("All Metadata":Circular economy enthusiast) OR ("All Metadata":Circular economy leader) OR ("All Metadata":Green champion) OR ("All Metadata":Green leader) OR ("All Metadata":Environmental leader) OR ("All Metadata":Ecosystem leader) OR ("All Metadata":Change agent) AND ("All Metadata":circular economy)

Fig. ii. Search queries.

Data availability

No data was used for the research described in the article.

References

Bag, S., Rahman, M.S., 2023. The role of capabilities in shaping sustainable supply chain flexibility and enhancing circular economy-target performance: an empirical study. Supply Chain Manag.: Int. J. 28 (1), 162–178.

Begum, S., Xia, E., Ali, F., Awan, U., Ashfaq, M., 2022. Achieving green product and process innovation through green leadership and creative engagement in manufacturing. J. Manuf. Technol. Manag. 33 (4), 656–674.

BGB, 2021. What makes a circular economy champion? https://www.bgbinnovation.com/knowledge/news-and-articles/what-makes-a-circular-economy-champion.

Bocken, N.M., De Pauw, I., Bakker, C., Van Der Grinten, B., 2016. Product design and business model strategies for a circular economy. Journal of industrial and production engineering 33 (5), 308–320.

Bosman, M., 2021. The Transition to a Circular economy—The Role of Circular Champions. Redboud University. https://theses.ubn.ru.nl/handle/123456789/11344.

Brouwer, S., Huitema, D., 2018. Policy entrepreneurs and strategies for change. Reg. Environ. Change 18, 1259–1272.

CEA, 2023. Policy advocacy for a circular future: influencing change at local and global levels. Circ. Econom. Alli. https://circulareconomyalliance.com/cea-blogs/policy-advocacy-for-a-circular-future-influencing-change-at-local-and-global-levels/.

CEC, 2023. Circular economy club research and case studies. https://www.circulareconomyclub.com/?geodir_search=1&stype=gd_place&sgd_placecategory%5B%5D=29&s=+&snear=&sgeo_lat=&sgeo_lon.

CEF, 2021. How HR professionals can play an active role in the circular economy—Insights—circle economy. Circle Econom. Found. https://assets-global.website-files.com/5d26d80e8836af2d12ed1269/607d8856980f6e851593a235_20210419%20-%20CJI%20Brief%20HR%20-%20circular%20human%20resource%20management%20-%20297x210mm.pdf.

Chizaryfard, A., Trucco, P., Nuur, C., 2021. The transformation to a circular economy: framing an evolutionary view. J. Evol. Econ. 31, 475–504.

Conduit, J., Karpen, I.O., Willmott, T., 2023. User circularity practices: adopting a user stewardship perspective for a circular economy. AMS Rev. 13 (3), 211–231.

Corvellec, H., Stowell, A.F., Johansson, N., 2022. Critiques of the circular economy. J. Ind. Ecol. 26 (2), 421–432.

Cramer, J., 2020. Implementing the circular economy in the amsterdam metropolitan area: the interplay between market actors mediated by transition brokers. Bus. Strat. Environ. 29 (6), 2857–2870.

Cramer, J., 2023. How circular economy and digital technologies can support the building sector to cope with its worldwide environmental challenge? Urban Sustain. 3 (1), 28.

Dedehayir, O., Mäkinen, S.J., Ortt, J.R., 2018. Roles during innovation ecosystem genesis: a literature review. Technol. Forecast. Soc. Change 136, 18–29.

Dubin, R., 1978. Theory Building: 2Nd (Revised) Edition. Free Press, New York.

Dunphy, D., Griffiths, A., Benn, S., 2007. Organizational Change for Corporate Sustainability: a Guide for Leaders and Change Agents of the Future, second ed. Routledge, London, United Kingdom.

Durkheim, E., 1895. The Rules of Sociological Method. The Free Press, New York trans. W.D. Hall.

Džajić Uršič, E., Fric, U., Rončević, B., 2024. The circular economy: recent debates and research trends. J. Infrastruct., Policy Dev. 8 (3), 2855.

EC, 2019. World Economic Forum Recognises European Commission as Champion in the Circular Economy. European Commission. https://commission.europa.eu/news/world-economic-forum-recognises-european-commission-champion-circular-economy-2019-01-22_en.

Ehrenfeld, J., 2004. Industrial ecology: a new field or only a metaphor? J. Clean. Prod. 12 (8–10), 825–831.

EIB, 2021. World Circular Economy Forum + Climate. European Investment Bank. https://www.eib.org/en/events/world-circular-economy-plus-climate.

Ellen Macarthur Foundation, 2018. Delivering the circular economy: a toolkit for policymakers. European Circular Economy Stakeholder Platform. https://circulareconomy.europa.eu/platform/en/toolkits-guidelines/delivering-circular-economy-toolkit-policymakers.

Ellen Macarthur Foundation, 2025. Case studies and examples of circular economy in action. https://www.ellenmacarthurfoundation.org/topics/circular-economy-introduction/examples.

Fobbe, L., Hilletofth, P., 2023. Moving toward a circular economy in manufacturing organizations: the role of circular stakeholder engagement practices. Int. J. Logist. Manag. 34 (3), 674–698.

Foss, N.J., Schmidt, J., Teece, D.J., 2023. Ecosystem leadership as a dynamic capability. Long. Range Plan. 56 (1), 102270.

Gallie, W.B., 1956. Essentially contested concepts. Proc. Aristot. Soc. 56 (1955 - 1956), 167–198.

Gerring, J., 1999. What makes a concept good? A criterial framework for understanding concept formation in the social sciences. Polity 31 (3), 357–393.

Gliedt, T., Hoicka, C.E., Jackson, N., 2018. Innovation intermediaries accelerating environmental sustainability transitions. J. Clean. Prod. 174, 1247–1261.
Goertz, G., 2006. Social Science Concepts: a User's Guide. Princeton University Press.
Gusmerotti, N.M., Testa, F., Corsini, F., Pretner, G., Iraldo, F., 2019. Drivers and approaches to the circular economy in manufacturing firms. J. Clean. Prod. 230, 314–327.
Heshmati, A., 2017. A review of the circular economy and its implementation. Int. J. Green Econ. 11 (3–4), 251–288.
Howie, P.C., Bagnall, R.G., 2020. A criterial framework for concept evaluation in social practice and scholarship. Socio. Methods Res. 49 (3), 719–741.
Hull, C.E., Millette, S., Williams, E., 2021. Challenges and opportunities in building circular-economy incubators: stakeholder perspectives in Trinidad and Tobago. J. Clean. Prod. 296, 126412.
Hurmelinna-Laukkanen, P., Möller, K., Nätti, S., 2022. Orchestrating innovation networks: alignment and orchestration profile approach. J. Bus. Res. 140, 170–188.
Jabareen, Y., 2009. Building a conceptual framework: philosophy, definitions, and procedure. Int. J. Qual. Methods 8 (4), 49–62.
Jakobsen, S., Lauvås, T., Quatraro, F., Rasmussen, E., Steinmo, M. (Eds.), 2021. Research Handbook of Innovation for a Circular Economy. Edward Elgar Publishing.
Kaipainen, J., Uusikartano, J., Aarikka-Stenroos, L., Harala, L., Alakerttula, J., Pohls, E. L., 2023. How to engage stakeholders in circular economy ecosystems: the process. In: Stakeholder Engagement in a Sustainable Circular Economy: Theoretical and Practical Perspectives. Springer International Publishing, Cham, pp. 193–231.
Kazancoglu, I., Sagnak, M., Kumar Mangla, S., Kazancoglu, Y., 2021. Circular economy and the policy: a framework for improving the corporate environmental management in supply chains. Bus. Strat. Environ. 30 (1), 590–608.
Kaplan, A., 1964. The Conduct of Inquiry: Methodology for Behavioral Science. Chandler, San Francisco.
Kelemen, R.D., Vogel, D., 2010. Trading places: the role of the United States and the european union in international environmental politics. Comp. Polit. Stud. 43 (4), 427–456.
Khan, O., Daddi, T., Iraldo, F., 2020. Microfoundations of dynamic capabilities: insights from circular economy business cases. Bus. Strat. Environ. 29 (3), 1479–1493.
Khan, S.A.R., Shah, A.S.A., Yu, Z., Tanveer, M., 2022. A systematic literature review on circular economy practices: challenges, opportunities and future trends. J. Entrepreneur. Emerg. Econom. 14 (5), 754–795.
Khanna, M., Gusmerotti, N.M., Frey, M., 2022. The relevance of the circular economy for climate change: an exploration through the theory of change approach. Sustainability 14 (7), 3991.
Kirchherr, J., Urbinati, A., Hartley, K., 2023a. Circular economy: a new research field? J. Ind. Ecol. 27 (5), 1239–1251.
Kirchherr, J., Yang, N.H.N., Schulze-Spüntrup, F., Heerink, M.J., Hartley, K., 2023b. Conceptualizing the circular economy (revisited): an analysis of 221 definitions. Resour. Conserv. Recycl. 194, 107001.
Korhonen, J., Honkasalo, A., Seppälä, J., 2018a. Circular economy: the concept and its limitations. Ecol. Econ. 143, 37–46.
Korhonen, J., Nuur, C., Feldmann, A., Birkie, S.E., 2018b. Circular economy as an essentially contested concept. J. Clean. Prod. 175, 544–552.
Kumar, B., Kumar, L., Kumar, A., Kumari, R., Tagar, U., Sassanelli, C., 2023. Green finance in circular economy: a literature review. Environ. Dev. Sustain. 1–41.
Liden, R.C., Sparrowe, R.T., Wayne, S.J., 1997. Leader-member exchange theory: the past and potential for the future. In: Ferris, G.R. (Ed.), Research in Personnel and Human Resources Management, vol. 15. Elsevier Science/JAI Press, pp. 47–119.
Liefferink, D., Wurzel, R.K., 2017. Environmental leaders and pioneers: agents of change? J. Eur. Publ. Pol. 24 (7), 951–968.
Loorbach, D., Frantzeskaki, N., Huffenreuter, R.L., 2015. Transition management: taking stock from governance experimentation. J. Corp. Citizen. (58), 48–66.
Maxwell, J.A., 2013. Qualitative Research Design: an Interactive Approach: an Interactive Approach. Sage.
Metcalf, M., Hinske, C., 2022. 10 Circular economy leadership. The Impossibilities of the Circular Economy 103. https://www.taylorfrancis.com/chapters/oa-edit/10.4324/9781003244196-12/circular-economy-leadership-maureen-metcalf-christoph-hinske.
Mignacca, B., Filippelli, S., Strazzullo, S., Tiburzi, L., Urbinati, A., Kirchherr, J., 2025. Building circular economy theories: a practical-oriented perspective and a way forward. J. Ind. Ecol.
Miles, M.B., Huberman, A.M., Saldaña, J., 2014. Qualitative Data Analysis: a Methods Sourcebook, third ed.
Modic, D., Johnson, A., Vučkovič, M., 2021. Towards measuring innovation for circular economy using patent data. In: Research Handbook of Innovation for a Circular Economy. Edward Elgar Publishing, pp. 265–276.
Molden, L., Modic, D., Rasmussen, E., Jakobsen, S., Vanhaverbeke, W. (Eds.), 2025. Research Handbook of Innovation in the Circular Bioeconomy. Edward Elgar Publishing.
Mousavi, S., Bossink, B., van Vliet, M., 2018. Dynamic capabilities and organizational routines for managing innovation towards sustainability. J. Clean. Prod. 203, 224–239.
Nyffenegger, R., Zehendner, A., Quarshie, A.M., Leuschner, R., 2024. Change agents' cognitive maps of circular supply chain transition–An investigation of barriers, actions, and outcomes. J. Purch. Supply Manag. 30 (4), 100906.
Nurminen, M., Mattila, M., Närvänen, E., 2024. Companies' future visions for circularity: a frame analysis based on Finnish front-runner CE companies. Clean. Prod. Lett 7, 100066.
Oberholzer, S., Sachs, S., 2023. Engaging stakeholders in the circular economy: a systematic literature review. Stakehold. Engage. Sustain. Circ. Eco. 57–97.
Paré, G., Trudel, M.C., Jaana, M., Kitsiou, S., 2015. Synthesizing information systems knowledge: a typology of literature reviews. Inf. Manag. 52 (2), 183–199.
Pinyol Alberich, J., Hartley, S., 2024. The circular economy in european union policy: explaining an idea's success through policy learning. Environ. Policy Govern. 34 (4), 363–374.
Pitkänen, J., Lehtimäki, H., Jokinen, A., 2023. Sustainability project champions as environmental leaders in a city organization: driving the urban circular economy. South Asian J. Bus. Manage. Cases 12 (1), 52–64.
Podsakoff, P.M., MacKenzie, S.B., Podsakoff, N.P., 2016. Recommendations for creating better concept definitions in the organizational, behavioral, and social sciences. Organ. Res. Methods 19 (2), 159–203.
Puntillo, P., Gulluscio, C., Huisingh, D., Veltri, S., 2021. Reevaluating waste as a resource under a circular economy approach from a system perspective: findings from a case study. Bus. Strat. Environ. 30 (2), 968–984.
Radicle, B.M.O., 2021. BMO radicle | balance is possible. Radicle Balance. https://radicle balance.com/resources/articles/the-3-principles-of-the-circular-economy.
Rainville, A., 2021. Stimulating a more circular economy through public procurement: roles and dynamics of intermediation. Res. Pol. 50 (4), 104193.
Ravitch, S.M., Riggan, M., 2016. Reason & Rigor: How Conceptual Frameworks Guide Research. Sage publications.
Reike, D., Vermeulen, W.J.V., Witjes, S., 2018. The circular economy: new or refurbished as CE 3.0? — exploring controversies in the conceptualization of the circular economy through a focus on history and resource value retention options. Resour. Conserv. Recycl. 135, 246–264.
Ramakrishna, S., Ngowi, A., Jager, H.D., Awuzie, B.O., 2020. Emerging industrial revolution: symbiosis of industry 4.0 and circular economy: the role of universities. Sci. Technol. Soc. 25 (3), 505–525.
Rincón-Moreno, J., Ormazabal, M., Jaca, C., 2022. Stakeholder perspectives in transitioning to a local circular economy: a case study in Spain. Circular *economy and sustainability*, 2, 693–711.
Roberts, T., Williams, I., Preston, J., Clarke, N., Odum, M., O'Gorman, S., 2021. A virtuous circle? Increasing local benefits from ports by adopting circular economy principles. Sustainability 13 (13), 7079.
Rodgers, B.L., Knafl, K., 2000. Beyond analysis: further adventures in concept development. Concept Development in Nursing: Foundations, Techniques, and Applications, pp. 321–332.
Rodríguez-Antón, J.M., Rubio-Andrada, L., Celemín-Pedroche, M.S., Ruíz-Peñalver, S.M., 2022. From the circular economy to the sustainable development goals in the european union: an empirical comparison. International environmental agreements: politics. Law Econom. 22 (1), 67–95.
Sandberg, J., Tsoukas, H., 2015. Practice theory: what it is, its philosophical base, and what it offers organization studies. In: The Routledge Companion to Philosophy in Organization Studies. Routledge, pp. 184–198.
Sartori, G., 1984. Guidelines for concept analysis. In: Social Science Concepts: a Systematic Analysis. Sage, CA, pp. 15–85.
Scarpellini, S., Marín-Vinuesa, L.M., Aranda-Usón, A., Portillo-Tarragona, P., 2020. Dynamic capabilities and environmental accounting for the circular economy in businesses. Sustainability accounting. Manage. Policy J. 11 (7), 1129–1158.
Sohal, A., De Vass, T., 2022. Australian SME's experience in transitioning to circular economy. J. Bus. Res. 142, 594–604.
Stahel, W.R., 2020. History of the circular economy. The historic development of circularity and the circular economy. In: Eisenriegler, S. (Ed.), The Circular Economy in the European Union. Springer International Publishing, pp. 7–19.
StartUs Insights, 2023. 10 Leading Circular Economy Examples in 2024. StartUs Insights. https://www.startus-insights.com/innovators-guide/circular-economy-examples/.
Suchek, N., Fernandes, C.I., Kraus, S., Filser, M., Sjögrén, H., 2021. Innovation and the circular economy: a systematic literature review. Bus. Strat. Environ. 30 (8), 3686–3702.
Sutherland, I., 2022. Entries open for awards celebrating circular practices. Architechure AU. https://architectureau.com/articles/entries-open-for-awards-celebrating-circular-practices/.
Sutton, R.I., Staw, B.M., 1995. What theory is not. Adm. Sci. Q. 371–384.
Taylor, A., Cocklin, C., Brown, R., Wilson-Evered, E., 2011. An investigation of champion-driven leadership processes. Leadersh. Q. 22 (2), 412–433.
Taylor, A., Cocklin, C., Brown, R., 2012. Fostering environmental champions: a process to build their capacity to drive change. J. Environ. Manag. 98, 84–97.
Thalheim, B., 2011. The theory of conceptual models, the theory of conceptual modelling and foundations of conceptual modelling. In: Embley, D., Thalheim, B. (Eds.), Handbook of Conceptual Modeling. Springer, Berlin, Heidelberg.
Teece, D.J., 2007. Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. Strateg. Manag. J. 28 (13), 1319–1350.
The Circulars, 2024. Circulars awards. Circ. Acce. https://thecirculars.org/awards-program.
Ul-Durar, S., Awan, U., Varma, A., Memon, S., Mention, A.-L., 2023. Integrating knowledge management and orientation dynamics for organization transition from eco-innovation to circular economy. J. Knowl. Manag. 27 (8), 2217–2248.
Ulaga, W., Kleinaltenkamp, M., Kashyap, V., Eggert, A., 2021. Advancing marketing theory and practice: guidelines for crafting research propositions. AMS Rev. 1–12.
UNEP, 2021. Global alliance on circular economy and resource efficiency. https://www.unep.org/gacere.
Urbinati, A., Chiaroni, D., Chiesa, V., 2017. Towards a new taxonomy of circular economy business models. J. Clean. Prod. 168, 487–498.
Urbinati, A., Chiaroni, D., Chiesa, V., Franzò, S., Frattini, F., 2018. An exploratory analysis on the contextual factors that influence disruptive innovation: the case of uber. Int. J. Innovat. Technol. Manag. 15 (3), 1850024.

Van Wassenhove, L.N., 2019. Sustainable innovation: pushing the boundaries of traditional operations management. Prod. Oper. Manag. 28 (12), 2930–2945.
Walker, A.M., Opferkuch, K., Roos Lindgreen, E., Raggi, A., Simboli, A., Vermeulen, W.J. V., Caeiro, S., Salomone, R., 2022. What is the relation between circular economy and sustainability? Answers from frontrunner companies engaged with circular economy practices. Circ. Econ. Sustain. 2 (2), 731–758.
WBCSD, 2019. Policy Enablers to Accelerate the Circular Economy. WBCSD. https://www.wbcsd.org/petatce.
Webster, J., Watson, R.T., 2002. Analyzing the past to prepare for the future: writing a literature review. MIS Q. xiii–xxiii.
WEF, 2020. Circular Economy Examples - how IKEA, Burger King and Adidas are investing in a Circular Economy. https://www.weforum.org/stories/2020/12/circular-economy-examples-ikea-burger-king-adidas/.
WEF, 2022. 21 Circular Economy Solutions: Changing How We Eat, Live and Travel for a More Sustainable World. World Economic Forum. https://www.weforum.org/agenda/2022/03/21-circular-economy-solutions/.
WEF, 2023. Partnerships Can Help Scale and Accelerate Circularity. Here's How. World Economic Forum. https://www.weforum.org/agenda/2023/09/partnerships-help-scale-accelerate-circularity-sdim23/.
WEF, 2025. The future of jobs report 2025. https://www.weforum.org/publications/the-future-of-jobs-report-2025/.
Weick, K.E., 1995. What theory is not, theorizing is. Adm. Sci. Q. 40 (3), 385–390.
Whetten, D.A., 1989. What constitutes a theoretical contribution? AMS Rev. 14 (4), 490–495.
Yadav, M.S., 2014. Enhancing theory development in marketing. AMS Rev. 4, 1–4.