

Sustainable Entrepreneurship in the Circular Economy: An Integrated Dynamic Capability Framework for Innovation, Organizational Resilience, and Long-Term Value Creation

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Abstract

Sustainability-driven transformation has increasingly become central to contemporary entrepreneurial and organizational discourse, particularly within the context of circular economy systems. However, existing research remains fragmented in explaining how sustainable entrepreneurial orientation translates into long-term organizational value. Most studies either emphasize innovation outcomes or environmental performance in isolation, leaving a conceptual gap in understanding the capability-based mechanisms underlying sustainability-driven value creation. This study addresses this gap by developing an integrated conceptual framework that explains how sustainable entrepreneurship contributes to long-term value creation through circular innovation capability and organizational resilience. Drawing upon Resource-Based View, Dynamic Capability Theory, Stakeholder Theory, and Institutional Theory, the paper conceptualizes sustainability not as a direct performance driver but as a multi-stage capability development process embedded within organizational and institutional contexts. The framework proposes that sustainable entrepreneurship strengthens circular innovation capability, which subsequently enhances organizational resilience, ultimately enabling sustained economic, environmental, and social value creation. Additionally, ESG governance and institutional support are identified as critical boundary conditions that shape the strength of these relationships. The study contributes to theory by shifting the focus from linear cause-effect relationships to a sequential capability-based understanding of sustainability transitions. Practically, it provides insights for managers and policymakers on how to design governance structures and institutional mechanisms that support circular economy transformation.

Keywords: Sustainable entrepreneurship; Circular economy; Dynamic capabilities; Organizational resilience; Circular innovation; ESG governance; Long-term value creation; Institutional theory.

1. Introduction

The accelerating climate crisis, increasing resource scarcity, and growing societal expectations regarding corporate responsibility have fundamentally reshaped the entrepreneurial landscape. Traditional entrepreneurial models that primarily emphasize economic value creation are increasingly challenged by demands for environmental stewardship, social inclusiveness, and responsible governance. Consequently, sustainable entrepreneurship has emerged as a transformative paradigm that seeks to reconcile economic growth with ecological preservation and social well-being (Cohen & Winn, 2007; Dean & McMullen, 2007; Shepherd & Patzelt, 2011). Rather than viewing sustainability as a constraint on business activity, contemporary entrepreneurs increasingly recognize it as a source of innovation, competitive differentiation, and long-term organizational resilience (Kraus et al., 2020; Muñoz & Cohen, 2018).

Parallel to this transformation, the circular economy has gained global prominence as an alternative to the conventional linear economic model characterized by the "take-make-dispose" approach. Circular economy

principles emphasize resource efficiency, product life extension, waste minimization, and regenerative production systems (Geissdoerfer et al., 2017; Kirchherr et al., 2017). International organizations increasingly recognize circularity as an essential pathway toward achieving the Sustainable Development Goals through sustainable production and consumption systems (United Nations, 2015; European Commission, 2020).

The convergence of sustainable entrepreneurship and circular economy principles has generated considerable scholarly interest over the past decade. Entrepreneurs are uniquely positioned to commercialize environmentally responsible innovations, redesign supply chains, introduce regenerative business models, and create new forms of stakeholder value. Unlike established corporations that may be constrained by legacy systems and organizational inertia, entrepreneurial ventures often possess the flexibility and adaptive capacity necessary to experiment with circular production systems, collaborative consumption models, industrial symbiosis, and resource-efficient innovations. As governments strengthen environmental regulations and investors increasingly integrate environmental, social, and governance (ESG) considerations into capital allocation decisions, sustainable entrepreneurial ventures are becoming central actors in the transition toward more resilient economic systems.

Recent empirical evidence demonstrates that organizations embracing sustainability-oriented innovation frequently outperform competitors in terms of innovation capability, stakeholder trust, resource efficiency, and long-term financial performance. Simultaneously, organizational resilience has become a strategic priority following global disruptions such as the COVID-19 pandemic, geopolitical instability, supply-chain shocks, and climate-induced disasters. These disruptions have underscored the limitations of efficiency-focused management models and reinforced the importance of adaptive capabilities that enable organizations to anticipate, absorb, and recover from external shocks. Sustainable entrepreneurship, when integrated with circular economy practices, may therefore provide organizations with strategic capabilities that enhance resilience while generating enduring economic, environmental, and social value.

Despite substantial advances in sustainability and entrepreneurship research, existing scholarship remains fragmented in several important respects. First, much of the literature examines sustainable entrepreneurship, circular economy, innovation capability, organizational resilience, and long-term performance as independent streams of inquiry. Although these constructs are conceptually interconnected, relatively few studies have integrated them within a comprehensive theoretical framework capable of explaining the mechanisms through which sustainable entrepreneurial practices ultimately translate into sustained organizational value creation.

Second, prior research has predominantly focused on direct relationships, such as the influence of sustainable entrepreneurship on firm performance or the effect of circular economy adoption on innovation outcomes. Such approaches provide valuable insights but often overlook the complex mediating and moderating processes through which entrepreneurial sustainability initiatives generate competitive advantage. Contemporary organizations operate within dynamic institutional environments characterized by evolving stakeholder expectations, regulatory uncertainty, technological disruption, and increasing resource constraints. Under these conditions, linear explanatory models may inadequately capture the multidimensional pathways through which sustainable entrepreneurship influences organizational outcomes.

Third, the theoretical foundations underpinning this body of literature remain insufficiently integrated. Studies frequently adopt a single theoretical lens—such as the Resource-Based View or Stakeholder Theory—without considering the complementary insights offered by Dynamic Capability Theory and Institutional Theory. As a result, current explanations often fail to account simultaneously for firms' internal strategic capabilities, external institutional pressures, stakeholder relationships, and adaptive learning processes. Addressing this theoretical fragmentation is essential for developing a more comprehensive understanding of sustainable value creation in circular economic systems.

Accordingly, this study proposes an integrated theoretical framework that combines Resource-Based View, Dynamic Capability Theory, Stakeholder Theory, and Institutional Theory to explain how sustainable entrepreneurship fosters long-term value creation through the sequential development of circular innovation capability and organizational resilience. Furthermore, the framework recognizes that ESG governance and

institutional support may strengthen or weaken these relationships, thereby providing a more nuanced explanation of organizational performance across different regulatory and competitive contexts.

2. Literature Review

2.1 Sustainable Entrepreneurship

The concept of sustainable entrepreneurship has evolved significantly over the past two decades, reflecting a broader transformation in how entrepreneurship is understood within the context of sustainable development. Unlike conventional entrepreneurship, which primarily focuses on identifying and exploiting opportunities for economic gain, sustainable entrepreneurship integrates economic, environmental, and social objectives into the entrepreneurial process (Dean & McMullen, 2007; Shepherd & Patzelt, 2011). It is grounded in the premise that entrepreneurial activities can simultaneously create financial value while addressing societal and ecological challenges, thereby contributing to long-term sustainable development (Cohen & Winn, 2007).

Early scholarship conceptualized sustainable entrepreneurship as the discovery and exploitation of opportunities arising from market failures associated with environmental degradation and social inequities (Dean & McMullen, 2007). Cohen and Winn (2007) further argued that inefficiencies such as pollution, resource depletion, and information asymmetries generate entrepreneurial opportunities for innovative firms capable of delivering both economic and environmental value. These foundational perspectives shifted entrepreneurship research beyond profit maximization toward a broader understanding of value creation encompassing multiple stakeholders.

Subsequent studies have expanded this perspective by emphasizing sustainability-oriented innovation, stakeholder engagement, and the creation of shared value. For instance, Schaltegger and Wagner (2011) proposed that sustainable entrepreneurs create competitive advantage by integrating environmental and social considerations into business strategy rather than treating sustainability as a compliance requirement. Similarly, Belz and Binder (2017) argued that sustainable entrepreneurial processes are characterized by the simultaneous recognition of environmental, social, and market opportunities, enabling firms to develop innovative business models that balance commercial success with societal well-being.

Recent empirical research further demonstrates that sustainable entrepreneurship positively influences innovation capability, competitive advantage, firm adaptability, and sustainable performance (Kraus et al., 2020; Muñoz & Cohen, 2018). Sustainability-oriented entrepreneurs frequently develop novel products, services, and business models that reduce resource consumption, minimize waste, and respond to evolving stakeholder expectations. Such innovations not only contribute to environmental objectives but also strengthen organizational legitimacy, enhance customer trust, and improve access to investment capital, particularly in markets where ESG considerations increasingly influence investor decision-making.

Despite these advances, the literature reveals several inconsistencies. First, there remains considerable conceptual ambiguity regarding the boundaries of sustainable entrepreneurship. Terms such as *green entrepreneurship*, *ecopreneurship*, *social entrepreneurship*, *environmental entrepreneurship*, and *sustainable entrepreneurship* are often used interchangeably despite important theoretical distinctions (Gast, Gundolf, & Cesinger, 2017). While green entrepreneurship primarily focuses on environmental protection, and social entrepreneurship prioritizes social impact, sustainable entrepreneurship encompasses the integrated pursuit of economic prosperity, environmental stewardship, and social equity. The lack of conceptual clarity complicates theory development and limits comparability across empirical studies.

Second, most empirical studies examine sustainable entrepreneurship as an antecedent of firm performance without adequately explaining the organizational capabilities through which value is created (Muñoz & Cohen, 2018; Kraus et al., 2020). This direct-effects approach overlooks the dynamic processes by which entrepreneurs translate sustainability-oriented intentions into innovation, resilience, and long-term organizational success. Consequently, scholars have increasingly called for multilevel theoretical models that explain the mechanisms linking sustainable entrepreneurial orientation with strategic organizational outcomes.

Another limitation concerns contextual diversity. Much of the existing evidence originates from developed economies, particularly Europe and North America, where institutional support for sustainability and circular economy initiatives is relatively mature (Geissdoerfer et al., 2020). Comparatively fewer studies investigate sustainable entrepreneurship in emerging economies, where entrepreneurs often operate under institutional constraints, limited access to green finance, and evolving regulatory frameworks. As a result, the generalizability of existing findings remains uncertain, highlighting the need for research that explicitly incorporates institutional conditions into theoretical models.

From a strategic management perspective, sustainable entrepreneurship should therefore be viewed not merely as an entrepreneurial orientation but as a dynamic organizational capability that enables firms to sense sustainability-related opportunities, seize emerging market demands, and continuously transform organizational resources in response to changing environmental and societal expectations. This perspective aligns with the Dynamic Capability Theory proposed by Teece (2007), which emphasizes an organization's ability to integrate, build, and reconfigure internal and external competencies under conditions of rapid environmental change.

Accordingly, the present study conceptualizes sustainable entrepreneurship as a strategic capability that initiates the development of circular innovation capabilities and organizational resilience rather than as an isolated determinant of firm performance. This conceptualization extends existing literature by explaining not only whether sustainable entrepreneurship creates value but also the organizational processes through which such value is generated over time.

2.2 Circular Economy

The circular economy (CE) has emerged as a dominant paradigm in sustainability discourse, challenging the traditional linear economic model of “take–make–dispose.” At its core, the circular economy seeks to decouple economic growth from resource consumption by designing restorative and regenerative systems that minimize waste and extend the lifecycle of products and materials (Geissdoerfer et al., 2017; Kirchherr et al., 2017). Unlike incremental efficiency improvements within linear systems, the circular economy represents a systemic shift in production and consumption patterns, emphasizing reuse, repair, refurbishment, remanufacturing, and recycling as key value-creation mechanisms (Bocken et al., 2016).

Despite its growing popularity, the concept of circular economy is characterized by definitional ambiguity. Kirchherr et al. (2017), in a comprehensive analysis of CE definitions, found significant variation in how scholars and practitioners interpret circularity, with differences in emphasis on economic prosperity, environmental sustainability, and social equity. While some definitions focus narrowly on waste reduction and resource efficiency, others adopt a broader systemic perspective that includes business model innovation, stakeholder collaboration, and regenerative design. This conceptual inconsistency has led to fragmented empirical research and limited theoretical consolidation.

From a business model perspective, circular economy strategies are increasingly recognized as drivers of innovation and competitive advantage. Bocken et al. (2016) categorize circular business model archetypes into slowing resource loops, closing resource loops, and narrowing resource flows. These archetypes highlight how firms can redesign value creation systems to reduce environmental impact while simultaneously generating economic value. Importantly, circular business models often require firms to rethink traditional ownership structures, shifting from product ownership to service-based models such as product-as-a-service, sharing platforms, and leasing systems.

However, implementing circular economy practices is not without challenges. Firms often face technological constraints, high initial investment costs, supply chain complexity, and uncertainty regarding regulatory frameworks. In addition, organizational resistance to change and lack of internal capabilities frequently hinder the transition from linear to circular systems. These challenges are particularly pronounced in small and medium-sized enterprises (SMEs), which may lack the financial and technical resources required for large-scale circular transformation (Lüdeke-Freund et al., 2019).

A critical gap in the literature is the limited understanding of how circular economy practices translate into organizational capabilities. Much of the existing research focuses on operational outcomes such as waste reduction, emissions reduction, or resource efficiency improvements. While these outcomes are important, they do not fully explain how firms develop sustained competitive advantage through circularity. In particular, there is limited integration between circular economy research and dynamic capability theory, which emphasizes the importance of organizational learning, adaptation, and resource reconfiguration in response to environmental change (Teece, 2007).

Recent studies suggest that circular economy adoption may foster innovation capability by encouraging firms to redesign products, processes, and supply chains in more sustainable ways (Geissdoerfer et al., 2020). For example, circular innovation often involves cross-sector collaboration, reverse logistics systems, and digital technologies such as IoT and blockchain to track material flows. These innovations not only reduce environmental impact but also enhance transparency, efficiency, and resilience in supply chain systems.

Another important development in the literature is the growing recognition of the circular economy's relationship with resilience. Circular systems, by design, reduce dependency on virgin resources and global supply chains, thereby potentially increasing firms' ability to withstand external shocks (Lüdeke-Freund et al., 2019). However, empirical evidence on this relationship remains limited and fragmented. Some studies suggest that circularity enhances resilience by diversifying resource inputs and closing material loops, while others argue that circular transitions may initially increase vulnerability due to system complexity and implementation costs.

Institutionally, the circular economy is strongly influenced by regulatory frameworks, public policy incentives, and stakeholder pressure. Governments in the European Union, China, and other regions have introduced circular economy action plans aimed at accelerating industrial transformation (European Commission, 2020). These institutional drivers create both opportunities and constraints for firms. While supportive policies can facilitate innovation and investment in circular systems, inconsistent regulations and lack of enforcement mechanisms may hinder widespread adoption.

In summary, the circular economy literature highlights a fundamental shift in how value creation is conceptualized in modern economies. However, existing research remains fragmented across operational, technological, and policy dimensions, with limited integration at the organizational capability level. This gap becomes particularly evident when examining how circular economy practices contribute to resilience and long-term value creation within entrepreneurial firms.

Accordingly, this study positions circular economy not merely as a set of operational practices but as a strategic innovation system that interacts with sustainable entrepreneurship to build organizational capabilities. This framing allows for a more dynamic understanding of how circular systems contribute to competitive advantage through innovation and resilience mechanisms.

2.3 Organizational Resilience and Innovation Capability

Organizational resilience has gained significant scholarly attention in recent years as firms increasingly operate in environments characterized by volatility, uncertainty, complexity, and ambiguity. Resilience is broadly defined as an organization's ability to anticipate disruptions, absorb shocks, adapt to changing conditions, and recover while maintaining core functions and ensuring long-term survival and growth (Lengnick-Hall et al., 2011; Ducheck, 2020). Unlike traditional risk management approaches that emphasize prevention and control, resilience emphasizes adaptability, learning, and transformation in response to unforeseen disruptions.

The importance of organizational resilience has become particularly evident in the context of recent global crises, including the COVID-19 pandemic, geopolitical tensions, climate-related disasters, and supply chain disruptions. These events have exposed the limitations of efficiency-driven organizational models that prioritize cost minimization and lean operations at the expense of flexibility and redundancy. As a result, resilience is increasingly viewed not as a reactive capability but as a proactive strategic asset embedded within organizational systems (Hillmann & Guenther, 2021).

From a theoretical perspective, resilience is closely aligned with Dynamic Capability Theory, which emphasizes the firm's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments (Teece, 2007). Within this framework, resilience is not merely an outcome but a capability that emerges from continuous learning, resource reconfiguration, and strategic renewal. Firms that develop strong dynamic capabilities are better positioned to sense environmental changes, seize emerging opportunities, and transform their resource base accordingly.

Recent literature suggests that innovation capability plays a central role in the development of organizational resilience. Innovation capability refers to an organization's ability to generate, implement, and scale new ideas, processes, and products that create value for stakeholders (O'Cass & Sok, 2014). In uncertain environments, innovation capability enables firms to respond effectively to disruptions by redesigning business models, introducing new technologies, and adapting operational processes.

In the context of sustainable entrepreneurship and circular economy systems, innovation capability becomes particularly critical. Circular innovation often requires firms to rethink traditional linear production models and adopt regenerative approaches such as product life extension, closed-loop supply chains, and service-based business models. These transformations are inherently complex and require significant organizational learning, cross-functional coordination, and external collaboration (Geissdoerfer et al., 2020).

Empirical studies indicate that firms with strong innovation capabilities are more resilient during periods of environmental turbulence. For instance, innovative firms are more likely to adapt their product portfolios, diversify supply chains, and adopt digital technologies that enhance flexibility and responsiveness. Innovation capability therefore acts as a bridge between sustainability-oriented strategies and organizational resilience outcomes.

However, the relationship between innovation capability and resilience is not straightforward. Some studies suggest that excessive focus on innovation may create organizational complexity and resource strain, potentially reducing short-term stability. Others argue that without structured innovation processes, firms may struggle to translate sustainability intentions into scalable outcomes. This tension highlights the need for a more integrated understanding of how innovation capability is developed and deployed within sustainability-oriented organizations.

Sustainable entrepreneurship provides a critical antecedent for both innovation capability and resilience. Entrepreneurs who adopt sustainability-oriented goals are more likely to engage in opportunity recognition processes that prioritize environmental and social value creation alongside economic returns (Shepherd & Patzelt, 2011). These opportunity recognition processes often lead to the development of novel products, services, and business models that enhance both innovation performance and adaptive capacity.

Moreover, sustainable entrepreneurial ventures are often embedded in stakeholder-rich environments, where collaboration with suppliers, customers, regulators, and communities plays a central role in value creation. Stakeholder engagement not only enhances legitimacy but also provides access to diverse knowledge resources that can strengthen innovation capability and resilience (Freeman, 1984; Harrison et al., 2010). This is particularly relevant in circular economy contexts, where inter-organizational collaboration is essential for closing resource loops and enabling system-level innovation.

Institutional conditions also play a significant role in shaping the relationship between innovation and resilience. Supportive regulatory environments, access to green finance, and innovation ecosystems can facilitate the development of circular innovation capabilities. Conversely, institutional uncertainty or weak regulatory enforcement may hinder firms' ability to invest in long-term sustainability-oriented innovation. This aligns with Institutional Theory, which suggests that organizational behavior is shaped by formal and informal rules, norms, and cultural-cognitive structures (Scott, 2001).

Despite these insights, existing literature remains fragmented in explaining how innovation capability translates into organizational resilience and ultimately into long-term value creation. Most studies examine innovation and

resilience as separate constructs rather than part of an integrated capability-building process. This limits theoretical understanding of how sustainable entrepreneurship influences organizational adaptation over time.

Accordingly, this study conceptualizes circular innovation capability as a key mediating mechanism linking sustainable entrepreneurship with organizational resilience. In turn, organizational resilience is viewed as a higher-order capability that enables firms to sustain performance and create long-term value in dynamic and uncertain environments.

2.4 ESG Governance & Institutional Support

Environmental, Social, and Governance (ESG) governance has emerged as a central mechanism through which firms are increasingly evaluated by investors, regulators, and broader stakeholder groups. ESG frameworks extend traditional corporate governance by incorporating environmental stewardship, social responsibility, and ethical management practices into organizational decision-making systems. Rather than functioning as a symbolic reporting mechanism, ESG governance is increasingly viewed as a strategic capability that shapes resource allocation, risk management, innovation decisions, and long-term value creation (Friede et al., 2015; Khan et al., 2016).

From a theoretical standpoint, ESG governance aligns closely with Stakeholder Theory, which posits that firms must balance the interests of multiple stakeholders including shareholders, employees, customers, regulators, and communities to achieve sustainable success (Freeman, 1984; Freeman et al., 2010). Firms that effectively integrate ESG principles into governance structures tend to experience improved legitimacy, reduced regulatory risk, and enhanced access to capital markets. In sustainability-driven contexts, ESG governance also plays a critical role in signaling organizational commitment to responsible practices, thereby strengthening stakeholder trust and institutional legitimacy.

In relation to sustainable entrepreneurship, ESG governance can be conceptualized as a moderating mechanism that strengthens the relationship between entrepreneurial sustainability orientation and circular innovation capability. Firms with robust ESG governance structures are more likely to institutionalize sustainability objectives, embed environmental criteria into strategic decision-making, and allocate resources toward long-term innovation projects. Conversely, weak ESG governance may limit the effectiveness of sustainable entrepreneurial initiatives by creating misalignment between strategic intent and organizational execution.

Institutional support represents another critical contextual factor influencing the success of sustainable entrepreneurship and circular economy adoption. Institutional Theory suggests that organizational behavior is shaped by regulative, normative, and cognitive pressures originating from the broader institutional environment (Scott, 2001). These pressures can either facilitate or constrain organizational change. In the context of sustainability transitions, institutional support may take the form of government policies, tax incentives, green subsidies, innovation ecosystems, infrastructure development, and regulatory frameworks that encourage circular practices.

Empirical evidence suggests that strong institutional support significantly enhances firms' ability to adopt sustainable and circular business models. For instance, countries with well-developed environmental policies and innovation ecosystems tend to exhibit higher rates of green entrepreneurship and circular innovation adoption. However, in weaker institutional environments, firms often face barriers such as regulatory uncertainty, limited access to green finance, and underdeveloped technological infrastructure, which constrain their ability to invest in long-term sustainability initiatives.

Importantly, ESG governance and institutional support do not operate in isolation. Instead, they interact with internal organizational capabilities to shape firm-level outcomes. Sustainable entrepreneurship alone is insufficient to guarantee long-term value creation unless supported by enabling governance structures and favorable institutional environments. This highlights the importance of adopting a multilevel theoretical perspective that integrates firm-level capabilities with external contextual conditions.

Research Gap

Despite significant advancements in the literature, several critical gaps remain unresolved. First, existing research on sustainable entrepreneurship and circular economy largely focuses on direct relationships between sustainability orientation and firm performance outcomes. This linear approach fails to capture the complex, multi-stage processes through which sustainability initiatives translate into organizational resilience and long-term value creation.

Second, there is limited integration between dynamic capability theory and circular economy research. While dynamic capabilities emphasize adaptation and resource reconfiguration in response to environmental change, circular economy studies often focus on operational efficiency and environmental outcomes. The lack of integration between these streams has resulted in fragmented theoretical explanations that do not fully account for capability development processes.

Third, although ESG governance is widely discussed in corporate finance and sustainability literature, its role as a moderating mechanism in entrepreneurial and innovation-driven contexts remains underexplored. Most studies treat ESG as an outcome or disclosure mechanism rather than a strategic governance system that actively shapes innovation pathways and capability development.

Fourth, the role of institutional support as a boundary condition in sustainable entrepreneurship research remains insufficiently theorized. While institutional theory acknowledges the importance of regulatory environments, relatively few studies explicitly examine how institutional support interacts with firm-level capabilities such as innovation and resilience to influence long-term value creation.

In response to these gaps, this study proposes an integrated conceptual framework that connects sustainable entrepreneurship, circular innovation capability, organizational resilience, ESG governance, and institutional support within a single theoretical model. The framework argues that sustainable entrepreneurship drives the development of circular innovation capability, which subsequently enhances organizational resilience. Organizational resilience then enables long-term value creation. Furthermore, ESG governance strengthens the transformation of sustainable entrepreneurial intent into innovation capability, while institutional support enhances the effectiveness of resilience in generating long-term value.

This integrated perspective contributes to existing literature in three important ways. First, it moves beyond fragmented, single-theory explanations by integrating Resource-Based View, Dynamic Capability Theory, Stakeholder Theory, and Institutional Theory into a unified explanatory framework. Second, it introduces a sequential capability-building logic that explains *how* sustainability-oriented entrepreneurship translates into long-term value creation through intermediate mechanisms. Third, it highlights the importance of governance and institutional contexts as critical boundary conditions shaping the effectiveness of sustainability-driven organizational transformation.

3. Theoretical Foundation and Conceptual Framework

3.1 Resource-Based View (RBV)

The Resource-Based View (RBV) provides a foundational lens for understanding how firms achieve sustained competitive advantage through unique, valuable, rare, inimitable, and non-substitutable (VRIN) resources (Barney, 1991). Within the context of sustainable entrepreneurship, RBV suggests that firms engaging in sustainability-oriented activities can develop distinctive resource bundles that are difficult for competitors to replicate. These resources may include green technologies, sustainability-oriented human capital, stakeholder trust, and reputational assets.

However, RBV has been criticized for its relatively static nature, as it does not fully explain how firms adapt their resources over time in response to environmental changes. This limitation is particularly relevant in the context of circular economy transitions, where firms must continuously reconfigure resource flows, redesign business

models, and adapt to evolving institutional pressures. As a result, RBV alone is insufficient to explain dynamic sustainability-driven transformation processes.

In this study, RBV is used to explain how sustainable entrepreneurship enables firms to accumulate strategic resources that serve as the foundation for circular innovation capability and long-term value creation.

3.2 Dynamic Capability Theory

Dynamic Capability Theory extends RBV by emphasizing a firm's ability to integrate, build, and reconfigure internal and external competencies in rapidly changing environments (Teece, Pisano, & Shuen, 1997; Teece, 2007). This perspective is particularly relevant for understanding sustainable entrepreneurship, as sustainability transitions require continuous adaptation, learning, and innovation.

Dynamic capabilities are typically conceptualized as consisting of three core processes:

- Sensing opportunities and threats
- Seizing opportunities through investment and innovation
- Reconfiguring organizational resources to maintain competitiveness

In the context of circular economy systems, these capabilities are essential for identifying sustainability-driven opportunities (such as waste valorization or product-life extension), developing innovative solutions, and restructuring operations to support circular flows.

Accordingly, this study positions circular innovation capability as a manifestation of dynamic capabilities, enabling firms to translate sustainable entrepreneurial intent into tangible innovation outcomes.

3.3 Stakeholder Theory

Stakeholder Theory posits that organizations must consider the interests of all stakeholders—rather than shareholders alone—to achieve long-term success (Freeman, 1984; Freeman et al., 2010). In sustainability contexts, stakeholders include customers, employees, regulators, communities, investors, and environmental entities.

Sustainable entrepreneurship inherently aligns with stakeholder theory because it seeks to balance economic, social, and environmental outcomes. Firms engaging in sustainable entrepreneurship often rely on stakeholder collaboration to co-create value, particularly in circular economy systems where inter-organizational cooperation is essential for closing material loops.

Stakeholder engagement also enhances access to knowledge, legitimacy, and resources, thereby strengthening both innovation capability and organizational resilience.

3.4 Institutional Theory

Institutional Theory explains how organizational behavior is shaped by regulative, normative, and cognitive pressures arising from the external environment (Scott, 2001). Firms operating under strong institutional support for sustainability—such as environmental regulations, ESG disclosure requirements, and green subsidies—are more likely to adopt circular economy practices. Institutional pressures can act as both constraints and enablers. While regulatory mandates may compel firms to adopt sustainable practices, supportive institutions can reduce uncertainty and lower the cost of innovation. In emerging economies, however, weak institutional environments may hinder sustainability transitions despite entrepreneurial intent.

Thus, institutional theory is used in this study to explain contextual variation in how effectively sustainable entrepreneurship translates into organizational outcomes.

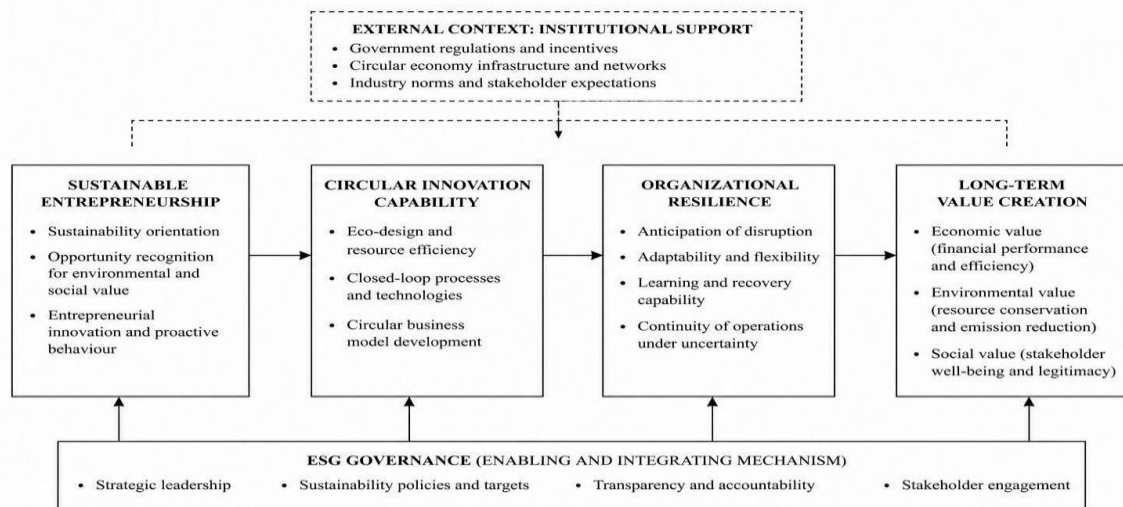


Figure 1. Capability-Based Conceptual Framework for Sustainable Entrepreneurship and Long-Term Value Creation in the Circular Economy

4. Hypothesis Development

Building upon the proposed conceptual framework, this section develops the hypotheses underpinning the study. Drawing on the Resource-Based View (RBV), Dynamic Capability Theory, Stakeholder Theory, and Institutional Theory, the hypotheses explain the mechanisms through which sustainable entrepreneurship contributes to long-term value creation. Specifically, the framework proposes that sustainable entrepreneurship enhances firms' circular innovation capability, which subsequently strengthens organizational resilience and facilitates long-term value creation. Furthermore, the relationships are expected to be influenced by ESG governance and institutional support, reflecting the importance of both internal governance mechanisms and external institutional environments.

Each hypothesis is developed through a synthesis of theoretical arguments and empirical evidence to ensure consistency with existing literature while identifying the study's novel contribution.

4.1 Sustainable Entrepreneurship and Circular Innovation Capability

Sustainable entrepreneurship extends the traditional entrepreneurial process by integrating environmental and social objectives with economic value creation (Dean & McMullen, 2007; Shepherd & Patzelt, 2011). Unlike conventional entrepreneurship, sustainable entrepreneurship encourages firms to recognize opportunities arising from environmental challenges, resource constraints, and changing stakeholder expectations, thereby fostering innovative solutions that contribute to sustainable development (Cohen & Winn, 2007). Entrepreneurs adopting sustainability-oriented strategies are more likely to invest in environmentally responsible technologies, redesign production processes, and develop circular business models that enhance resource efficiency and minimize waste (Belz & Binder, 2017).

The Resource-Based View (Barney, 1991) suggests that firms achieve sustainable competitive advantage through the possession and effective deployment of valuable, rare, inimitable, and non-substitutable resources. Sustainable entrepreneurship facilitates the development of such strategic resources by promoting organizational learning, knowledge integration, stakeholder collaboration, and environmental innovation. However, the dynamic nature of sustainability challenges requires organizations not only to possess strategic resources but also to continuously renew and reconfigure them. Dynamic Capability Theory complements RBV by emphasizing that firms capable of sensing environmental opportunities, seizing emerging markets, and reconfiguring organizational resources are more likely to sustain innovation under changing conditions (Teece et al., 1997; Teece, 2007).

Within the circular economy, innovation extends beyond technological advancement to encompass the redesign of products, services, production systems, and business models that maintain the value of materials throughout their lifecycle (Bocken et al., 2016; Geissdoerfer et al., 2017). Sustainable entrepreneurial firms are therefore better positioned to develop circular innovation capability, defined as the organizational ability to generate, implement, and scale innovations that support regenerative resource flows, closed-loop production systems, and sustainable value creation.

Empirical evidence supports this relationship. Sustainable entrepreneurial orientation has been positively associated with eco-innovation, green product development, and sustainable business model innovation (Belz & Binder, 2017; Muñoz & Cohen, 2018). Similarly, organizations that integrate sustainability into strategic decision-making demonstrate greater innovation capability by leveraging stakeholder knowledge, technological advancements, and collaborative partnerships to address environmental challenges (Schaltegger & Wagner, 2011). Consequently, sustainable entrepreneurship is expected to strengthen firms' capability to develop and implement circular innovations.

H1: Sustainable entrepreneurship positively influences circular innovation capability.

4.2 Circular Innovation Capability and Organizational Resilience

Circular innovation capability represents an organization's ability to design and implement regenerative, resource-efficient, and closed-loop systems that minimize waste while maximizing value creation (Bocken et al., 2016; Geissdoerfer et al., 2017). Unlike incremental operational improvements, circular innovation involves systemic redesign of products, processes, and business models. Such capability is increasingly recognized as a strategic enabler of adaptability in uncertain and resource-constrained environments.

Organizational resilience refers to a firm's ability to anticipate disruptions, absorb shocks, adapt to changing conditions, and recover while maintaining core functionality (Lengnick-Hall et al., 2011; Duchek, 2020). In dynamic environments characterized by supply chain volatility, regulatory shifts, and environmental crises, resilience is no longer a passive attribute but a dynamic capability that emerges from continuous learning and reconfiguration.

Dynamic Capability Theory (Teece, 2007) provides a strong theoretical foundation for linking circular innovation capability with resilience. Firms that continuously innovate in response to environmental constraints develop greater flexibility in resource allocation and stronger adaptive capacity. Circular innovation enhances resilience by reducing dependency on linear supply chains, improving resource recovery systems, and enabling alternative value creation pathways.

Empirical studies also suggest that firms engaged in sustainable and circular innovation are better equipped to respond to external shocks due to diversified resource flows and increased operational flexibility (Geissdoerfer et al., 2020). Accordingly, organizations with strong circular innovation capability are more likely to demonstrate higher levels of resilience.

H2: Circular innovation capability positively influences organizational resilience.

4.3 Organizational Resilience and Long-Term Value Creation

Organizational resilience is increasingly conceptualized as a strategic capability that enables firms to sustain performance under adverse and uncertain conditions (Duchek, 2020; Hillmann & Guenther, 2021). Rather than focusing solely on short-term survival, resilient organizations are able to adapt, recover, and evolve in ways that ensure long-term continuity and value creation.

From a Resource-Based View perspective (Barney, 1991), resilience can be considered a valuable organizational capability that contributes to sustained competitive advantage. Firms with high resilience are better able to protect and renew their resource base during disruptions, thereby maintaining long-term strategic positioning. Moreover, resilience supports organizational learning, allowing firms to convert crises into opportunities for innovation and transformation.

Stakeholder Theory (Freeman, 1984) further suggests that resilient organizations are more capable of maintaining trust and legitimacy among key stakeholders during periods of uncertainty. This stability enhances long-term value creation by strengthening relationships with customers, investors, employees, and regulatory bodies.

Empirical research indicates that resilient firms outperform less resilient counterparts in terms of long-term financial stability, innovation performance, and sustainability outcomes. Resilience enables firms to maintain continuity in operations while simultaneously investing in future-oriented capabilities such as digital transformation and sustainability innovation.

In the context of circular economy systems, resilience also plays a critical role in ensuring that resource loops remain functional during disruptions. Firms that can maintain operational continuity while adapting their resource flows are more likely to achieve sustained value creation over time.

H3: Organizational resilience positively influences long-term value creation.

4.4 Sustainable Entrepreneurship and Long-Term Value Creation

Sustainable entrepreneurship has been widely recognized as a strategic approach that integrates economic objectives with environmental and social considerations (Cohen & Winn, 2007; Shepherd & Patzelt, 2011). Beyond its normative appeal, sustainable entrepreneurship can also be understood as a value-creating mechanism that enables firms to identify and exploit opportunities arising from environmental challenges and resource inefficiencies (Dean & McMullen, 2007).

From a Resource-Based View (Barney, 1991), sustainable entrepreneurship fosters the development of intangible assets such as reputation, stakeholder trust, and sustainability-oriented knowledge systems. These resources enhance a firm's ability to differentiate itself in competitive markets and create long-term economic value. Moreover, firms that adopt sustainability-oriented strategies are more likely to benefit from enhanced legitimacy and access to green finance, both of which contribute to long-term organizational survival and growth.

However, the relationship between sustainable entrepreneurship and long-term value creation is not purely direct. Value creation is increasingly shaped by intermediate capabilities such as innovation and resilience, which enable firms to convert sustainability-oriented intent into sustained performance outcomes. Therefore, while sustainable entrepreneurship is expected to positively influence long-term value creation, this relationship is likely to be partially mediated by organizational capabilities.

H4: Sustainable entrepreneurship positively influences long-term value creation.

4.5 Mediating Role of Circular Innovation Capability

Circular innovation capability represents the organizational ability to develop and implement regenerative and resource-efficient innovations that support circular economy principles (Bocken et al., 2016; Geissdoerfer et al., 2017). It serves as a critical mechanism through which sustainable entrepreneurial orientation is translated into operational and strategic outcomes.

Dynamic Capability Theory (Teece, 2007) suggests that firms must continuously reconfigure their resources to respond to changing environmental conditions. Sustainable entrepreneurship provides the strategic intent, while circular innovation capability operationalizes this intent by enabling firms to redesign products, processes, and business models.

Empirical research indicates that innovation capability plays a central mediating role in transforming sustainability-oriented strategies into performance outcomes (Schaltegger & Wagner, 2011; Geissdoerfer et al., 2020). Firms with strong circular innovation capability are better able to generate sustainable competitive advantage, which ultimately contributes to long-term value creation.

Accordingly, circular innovation capability is expected to mediate the relationship between sustainable entrepreneurship and both organizational resilience and long-term value creation.

H5: *Circular innovation capability mediates the relationship between sustainable entrepreneurship and organizational resilience.*

4.6 Mediating Role of Organizational Resilience

Organizational resilience is increasingly conceptualized as an outcome of adaptive learning and dynamic capability development (Duchek, 2020; Hillmann & Guenther, 2021). Firms that engage in sustainable entrepreneurship and circular innovation are more likely to develop adaptive systems that enhance their ability to respond to disruptions and environmental uncertainty.

Resilience acts as a higher-order capability that enables firms to sustain performance during crises and maintain strategic continuity over time. From a Stakeholder Theory perspective (Freeman, 1984), resilient firms are better positioned to maintain stakeholder trust and legitimacy, which are essential for long-term value creation.

Thus, organizational resilience is expected to function as a mediator between circular innovation capability and long-term value creation, as well as between sustainable entrepreneurship and long-term performance outcomes.

H6: *Organizational resilience mediates the relationship between circular innovation capability and long-term value creation.*

4.7 Sequential Mediation of Circular Innovation Capability and Organizational Resilience

The integration of Resource-Based View and Dynamic Capability Theory suggests that sustainable entrepreneurship influences long-term value creation through a sequential capability-building process. Initially, sustainable entrepreneurship fosters the development of circular innovation capability by encouraging firms to integrate sustainability into their strategic and operational activities. This innovation capability subsequently enhances organizational resilience by increasing flexibility, adaptability, and resource efficiency.

Resilient organizations are better able to sustain performance under uncertainty and convert adaptive capabilities into long-term value creation. This sequential process reflects a multi-stage transformation from strategic intent to operational capability to organizational outcome.

Such sequential mediation has been increasingly emphasized in recent sustainability and entrepreneurship research, where complex value creation processes are understood as layered capability development rather than direct causal relationships.

H7: *Circular innovation capability and organizational resilience sequentially mediate the relationship between sustainable entrepreneurship and long-term value creation.*

4.8 Moderating Role of ESG Governance

Environmental, Social, and Governance (ESG) governance represents a structured approach through which firms integrate sustainability principles into decision-making processes, accountability systems, and strategic planning (Friede et al., 2015; Khan et al., 2016). ESG governance enhances transparency, aligns stakeholder expectations, and institutionalizes sustainability within organizational routines.

From a Stakeholder Theory perspective (Freeman, 1984), ESG governance strengthens the alignment between firm strategy and stakeholder expectations, thereby enhancing the effectiveness of sustainable entrepreneurship initiatives. Firms with strong ESG governance are more likely to allocate resources toward sustainability-oriented innovation and embed environmental considerations into core strategic decisions.

Therefore, ESG governance is expected to strengthen the relationship between sustainable entrepreneurship and circular innovation capability by providing structural and institutional support for sustainability-driven innovation.

H8: *ESG governance positively moderates the relationship between sustainable entrepreneurship and circular innovation capability, such that the relationship is stronger when ESG governance is high.*

4.9 Moderating Role of Institutional Support

Institutional Theory posits that organizational behavior is shaped by external regulative, normative, and cognitive pressures (Scott, 2001). Institutional support, including government policies, subsidies, infrastructure, and regulatory frameworks, plays a critical role in enabling or constraining sustainable entrepreneurship.

In contexts with strong institutional support, firms are more likely to invest in long-term sustainability initiatives due to reduced uncertainty and increased access to resources. Conversely, weak institutional environments may hinder the effectiveness of resilience-building mechanisms, limiting firms' ability to convert adaptive capacity into long-term value creation.

Accordingly, institutional support is expected to strengthen the relationship between organizational resilience and long-term value creation by providing a favorable external environment that enhances the returns on resilience-building efforts.

H9: Institutional support positively moderates the relationship between organizational resilience and long-term value creation, such that the relationship is stronger when institutional support is high.

5. Methodology

5.1 Research Design

This study adopts a qualitative, theory-building research design to develop an integrated conceptual framework explaining how sustainable entrepreneurship drives long-term value creation in circular economy systems. A qualitative approach is appropriate given the exploratory nature of the research and the need to synthesize fragmented literature across sustainable entrepreneurship, circular economy, organizational resilience, and ESG governance into a unified theoretical model.

Rather than testing hypotheses empirically, the study focuses on conceptual integration and interpretive synthesis of existing scholarly work to develop new theoretical relationships and propositions.

5.2 Data Sources and Approach

The study is based on a systematic and interpretive review of existing academic literature. Peer-reviewed journal articles, conceptual papers, and policy reports published in high-impact journals related to entrepreneurship, sustainability, innovation, and strategic management were examined.

Key databases used for literature identification include Scopus, Web of Science, and Google Scholar. Priority was given to studies published between 2007 and 2026 to ensure inclusion of foundational theories and recent developments in circular economy and sustainable entrepreneurship research.

5.3 Analytical Method

The study employs a thematic synthesis approach, involving three stages:

1. Open coding of key concepts related to sustainable entrepreneurship, circular innovation, resilience, ESG governance, and institutional support.
2. Axial coding to identify relationships between constructs and emerging patterns across literature streams.
3. Selective coding to integrate themes into a coherent conceptual framework explaining pathways to long-term value creation.

This iterative process enables the development of higher-order theoretical relationships while maintaining alignment with established management theories such as the Resource-Based View and Dynamic Capability Theory.

To ensure methodological rigor, the study follows established principles of qualitative synthesis, including:

- Use of peer-reviewed and credible academic sources only
- Triangulation of findings across multiple theoretical streams
- Transparent documentation of theme development
- Reflexive interpretation to avoid bias in conceptual integration

Credibility is ensured through theoretical triangulation, drawing on multiple perspectives including Resource-Based View, Dynamic Capability Theory, Stakeholder Theory, and Institutional Theory.

6. Discussion

The present study develops a comprehensive conceptual framework explaining how sustainable entrepreneurship contributes to long-term value creation in circular economy systems through the sequential development of circular innovation capability and organizational resilience. By integrating Resource-Based View, Dynamic Capability Theory, Stakeholder Theory, and Institutional Theory, the study moves beyond fragmented explanations in the literature and offers a more holistic understanding of sustainability-driven organizational transformation.

A key insight emerging from the framework is that sustainable entrepreneurship alone is insufficient to guarantee long-term value creation. Instead, its effectiveness is contingent upon the development of intermediate organizational capabilities. Specifically, circular innovation capability acts as a critical mechanism through which sustainability-oriented entrepreneurial intentions are translated into actionable innovations such as closed-loop systems, eco-efficient processes, and regenerative business models. This finding aligns with Dynamic Capability Theory, which emphasizes that competitive advantage is not derived from resources alone but from the ability to continuously reconfigure them in response to environmental change (Teece, 2007).

Furthermore, the study highlights organizational resilience as a second-order capability that emerges from sustained innovation efforts. Rather than being a static organizational trait, resilience is conceptualized here as an evolving capability that enables firms to absorb disruptions, adapt to uncertainty, and maintain continuity in value creation processes. This extends prior research by positioning resilience not only as an outcome of environmental adaptation but also as a strategic enabler of long-term sustainability performance (Duchek, 2020; Hillmann & Guenther, 2021).

Another important insight is the role of ESG governance in strengthening the translation of sustainable entrepreneurship into innovation capability. ESG governance systems institutionalize sustainability values within organizational decision-making structures, ensuring that environmental and social considerations are embedded in strategic planning and resource allocation. This finding reinforces Stakeholder Theory, which argues that firms achieve long-term success by balancing the interests of multiple stakeholder groups rather than prioritizing short-term shareholder returns (Freeman, 1984).

Similarly, institutional support emerges as a critical boundary condition influencing the effectiveness of resilience in generating long-term value. Firms operating in environments with strong regulatory frameworks, supportive public policies, and developed innovation ecosystems are better positioned to leverage resilience capabilities for sustained value creation. This is consistent with Institutional Theory, which emphasizes that organizational behavior is shaped by the broader regulatory and normative environment (Scott, 2001).

Importantly, the sequential nature of the proposed framework offers a more nuanced explanation of sustainability-driven value creation than existing direct-effect models. Rather than assuming that sustainable entrepreneurship directly enhances firm performance, the study demonstrates that value creation occurs through a multi-stage process involving capability development and environmental interaction. This perspective addresses a key limitation in prior research, which often overlooks the intermediate mechanisms linking sustainability orientation to long-term outcomes. Overall, the discussion underscores that sustainable entrepreneurship should be understood

as a dynamic strategic process embedded within organizational capabilities and institutional contexts, rather than as an isolated entrepreneurial attribute.

7. Theoretical Contributions

This study makes several significant theoretical contributions to the literature on sustainable entrepreneurship, circular economy, and organizational resilience.

First, it integrates four major theoretical perspectives—Resource-Based View, Dynamic Capability Theory, Stakeholder Theory, and Institutional Theory—into a unified explanatory framework. Prior research has typically relied on single-theory approaches, resulting in fragmented and partial explanations. By combining these perspectives, the study provides a more comprehensive understanding of how sustainability-oriented entrepreneurship generates long-term value.

Second, the study advances Dynamic Capability Theory by specifying circular innovation capability as a distinct organizational capability that mediates the relationship between sustainable entrepreneurship and resilience. This extends the theory by contextualizing dynamic capabilities within circular economy systems, an area that has received limited theoretical attention.

Third, the study contributes to resilience literature by conceptualizing organizational resilience as a mediating capability rather than a static organizational outcome. This shifts the understanding of resilience from a defensive mechanism to a proactive value-creating capability that emerges through innovation processes.

Fourth, the study contributes to Stakeholder Theory by demonstrating the enabling role of ESG governance in embedding stakeholder considerations into organizational decision-making. This highlights governance structures as active mechanisms rather than passive reporting systems.

Fifth, the incorporation of institutional support as a boundary condition extends Institutional Theory by demonstrating how external environments shape the effectiveness of internal capabilities in generating long-term value.

Finally, the study contributes an original sequential capability-based model of sustainable value creation, showing that long-term value is not produced directly but emerges through a layered process of capability development and environmental interaction.

8. Practical Implications

The findings of this study offer several important implications for managers, entrepreneurs, and organizational leaders operating in sustainability-driven and circular economy contexts.

First, the study highlights that sustainable entrepreneurship should not be treated as a symbolic or peripheral organizational activity. Instead, managers must recognize it as a strategic capability-building process. Firms should actively integrate sustainability into core strategic planning rather than limiting it to compliance or corporate social responsibility functions. This involves embedding sustainability objectives into innovation pipelines, resource allocation decisions, and long-term growth strategies.

Second, the findings emphasize the importance of circular innovation capability as a key organizational asset. Managers should invest in developing capabilities related to eco-design, resource efficiency, reverse logistics, and regenerative business models. This requires cross-functional collaboration, continuous learning systems, and the adoption of digital technologies that enable tracking and optimization of resource flows.

Third, the study underscores the strategic role of organizational resilience. In highly uncertain environments, firms must move beyond efficiency-focused models and develop adaptive systems capable of responding to disruptions.

This includes diversifying supply chains, building redundancy into critical systems, and fostering a culture of agility and continuous improvement.

Fourth, the results highlight the importance of ESG governance structures. Organizations should formalize ESG integration within board-level decision-making processes, ensuring that environmental and social considerations are embedded in strategic governance. Strong ESG governance not only improves legitimacy but also strengthens the translation of sustainability orientation into innovation outcomes.

Finally, firms operating in different institutional contexts must recognize that external support systems matter significantly. Organizations in environments with strong policy incentives, regulatory clarity, and innovation infrastructure are more likely to successfully translate resilience into long-term value creation. Managers should therefore actively engage with policymakers, industry associations, and innovation ecosystems to leverage institutional support.

9. Policy Implications

This study also offers several implications for policymakers and regulatory bodies.

First, governments should recognize that sustainable entrepreneurship is a key driver of circular economy transitions. Policy frameworks should therefore be designed to encourage entrepreneurial experimentation in sustainability-oriented innovation. This can include tax incentives, green subsidies, and funding schemes for circular economy startups.

Second, the findings suggest that institutional support plays a critical moderating role in enhancing the effectiveness of organizational resilience. Policymakers should therefore focus on building stable and transparent regulatory environments that reduce uncertainty for firms investing in long-term sustainability initiatives.

Third, there is a need to strengthen innovation ecosystems that support circular economy development. This includes investments in research and development infrastructure, public–private partnerships, and platforms that facilitate collaboration between entrepreneurs, corporations, and research institutions.

Fourth, regulators should encourage the adoption of ESG governance frameworks by promoting standardized reporting systems and integrating ESG criteria into corporate disclosure requirements. This will improve transparency and ensure that sustainability is embedded into corporate governance structures.

Finally, policy interventions should move beyond compliance-based approaches toward systemic transformation strategies that encourage circular business models, regenerative production systems, and long-term value creation.

10. Conclusion

This study developed an integrated conceptual framework explaining how sustainable entrepreneurship contributes to long-term value creation within circular economy systems. By synthesizing Resource-Based View, Dynamic Capability Theory, Stakeholder Theory, and Institutional Theory, the study offers a comprehensive explanation of how sustainability-oriented entrepreneurial activities translate into organizational outcomes through sequential capability development.

The findings demonstrate that sustainable entrepreneurship does not directly generate long-term value. Instead, it operates through a structured pathway involving circular innovation capability and organizational resilience. Furthermore, ESG governance and institutional support play critical roles in strengthening these relationships by shaping internal decision-making structures and external environmental conditions.

Overall, this study advances theoretical understanding of sustainable entrepreneurship by shifting the focus from isolated effects to multi-level, capability-based, and context-dependent value creation processes. It provides a

foundation for future empirical research and offers actionable insights for managers and policymakers seeking to promote sustainable and resilient economic systems.

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