COMPETITIVE ADVANTAGE AND THE CIRCULAR ECONOMY MODEL

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Abstract

The United Nations' 17 Sustainable Development Goals, to be achieved by 2030, underscore the necessity of adopting a circular economy as a sustainable alternative to the existing production and resource management paradigm. The circular economy plays an essential role for economic expansion, social development, and climate change initiatives, since investing in infrastructures, sustainable company growth, and technological improvement are necessary for economic and social success. Despite the prospective advantages of the circular economy, the transition towards it is yet limited. The Ellen MacArthur Foundation underscores the necessity for a systemic transition to alleviate the impacts of the linear economy, enhance resilience, and provide environmental and social benefits. The objectives of the circular economy cannot be realised via isolated actions; they necessitate a systemic revolution across organisations, sectors, and economies, propelled by significant alterations in cultural values, standards and behaviours. Cultural obstacles, including customer apathy and lack of awareness, along with hesitant corporate cultures, are the principal hindrances to enterprises advancing towards the circular economy. However, the circular economy is gaining increasing favour post-Covid-19 epidemic, as firms acknowledge its long-term advantages. This study concisely discusses the notion of circular economy and evaluates the benefits of integrating these approaches into a corporate strategy. This article serves as a literature review summarising key phrases intended to guide future study. The results were derived using the established framework.

Keywords: *circular economy, competitive advantage, sustainability, Sustainable Development Goals*

Classification JEL: *M1; M9*

1. Introduction and context of the study

The world at large is presently experiencing a multitude of interconnected issues. Resource depletion and climate change-related phenomena, such as rising temperatures, recurrent natural catastrophes, and escalating droughts (Aengenheyster et al, 2018), constitute the context of the "slow crisis" that society is facing in the time of globalization (Toma, 2005; Marinescu and Toma, 2015a). This situation is further intensified by the socio-economic ramifications of the persisting COVID-19 pandemic (Catană et al, 2021) and the energy crisis brought on by the ongoing Russia–Ukraine war.

These unexpected problems disproportionately affect the most vulnerable, thrusting nearly 75 million individuals into extreme poverty and exacerbating global disparities (Chancel et al, 2022). In this context, the efficacy of existing policy initiatives, including the European Green Deal (European Council, 2019) as well as the Fit for 55 package (European Council, 2022), is called into question, highlighting an urgent necessity to reevaluate our economic frameworks to concurrently tackle sustainability issues and socio-economic disparities. A promising framework is the Circular Economy, a model with the capacity to harmonise the trinity of sustainability: economy, society, along with environment (Wiebe et al, 2022).

The circular economy is seen as the most efficient method for attaining worldwide sustainability (Murray et al, 2017). The European Environment Agency (EEA, 2015) emphasised that the circular economy prioritises the efficiency of material resources, encompassing both waste

management and waste avoidance. Establishing a circular economy via the design of a regenerative industrial system is a significant challenge. This study briefly examines this notion and the prospective competitive advantage it may provide to companies.

2. Literature review

In 2015, the United Nations (UN) instituted the 17 Sustainable Development Goals, which were embraced by global leaders, with the objective of accomplishing them by 2030. Although each goal addresses distinct aspects and purposes, they all share a common principle: the adoption of a circular economy as a sustainable alternative to the existing model of production and control of resources, which adversely affects the economy as well as social and environmental aspects. Goal number 9: 'Industry, Innovation and Infrastructure' is crucial as economic growth, social advancement, and efforts to address climate change significantly rely on investments in infrastructure, sustainable business growth and development, and technical advancement (UN, 2015).

In the past decade, circular economy has emerged as a prominent focus for both academic and professional sectors, representing an essential aspect of sustainable development centred on regenerative, restorative, and sustainable business practices (Gupta et al, 2019). The circular economy underscores the necessity for business models to transcend the conventional linear economy paradigm of production, consumption, and disposal, advocating instead for a framework centred on the 3Rs: recycle, reduce, as well as reuse (Tseng et al, 2018).

Cramer (2020) asserts that when a product has been utilised, it is essential to evaluate all forms of product reuse options, encompassing repurposing and refurbishing, referred to as the Circular Economy. The operationalisation of a circular economy necessitates a paradigm change that facilitates the establishment of new value networks for the reuse, recycling, and repair of returned items, as highlighted by Awan et al (2022). This economic concept seeks to optimise resource utilisation by minimising waste, prolonging product lifespan, and promoting the reuse and recycling of resources (Morseletto, 2020). Awan et al (2021) emphasise that enterprises must actively define their position relative to the circular system, while governments should include feedback mechanisms to promote resilient and adaptable circular economy initiatives. Policymakers must incentivise the advancement of affordable and effective technologies while promoting standardisation regulations to alleviate technical hurdles (Gautam and Bolia, 2024).

Despite several experts and organisations asserting that circular economy efforts enhance competitiveness and promote sustainable development (Gusmerotti and others, 2019), the shift towards a circular economy remains modest (Hartley and others., 2020). In the context of the promising aspects of circular economy viability and sustainable growth, enquiries have emerged on whether the circular economy is specifically advantageous for businesses (Korhonen and others, 2018), in addition to its environmental and social benefits.

The circular economy is an overarching concept encompassing several terminology and concepts (Blomsma and Brennan, 2017). Nonetheless, a prevalent objective is to tackle structural waste while generating new value creation possibilities and minimising value degradation and loss. The Ellen MacArthur Foundation emphasises that the shift to a circular economy necessitates a systemic transformation aimed at mitigating the effects of the linear economy, while simultaneously fostering resilience over time and creating economic and business prospects, alongside delivering environmental and social advantages. The foundation identifies three principles that underpin the circular economy. Firstly, the preservation and enhancement of natural capital, management of finite resources, and equilibrium of flows and reusable resources; secondly, the optimisation of asset utilisation by maximising the utility of goods, parts, and materials for the longest duration possible within both technological and biological cycles; and lastly, the enhancement of system efficacy by proactively identifying and mitigating adverse externalities (Suchek et al, 2021) .

The circular economy's goals cannot be achieved via individual efforts. The circular economy necessitates a systemic transformation inside businesses, industries, and economies, driven by profound alterations in cultural values, norms, and behaviours (Chizaryfard et al, 2020). The circular economy is fundamentally linked to environmentally friendly developments in societal legislation, production, and consumption (Prieto-Sandoval et al, 2018). Some scholars assert that cultural barriers, particularly consumers' disinterest and limited awareness, along with reticent corporate cultures, represent the primary impediments to companies progressing towards the circular economy, indicating that the circular economy has not yet achieved mainstream acceptance (Kirchherr et al, 2017). In recent years, following the Covid-19 pandemic, the circular economy is experiencing growing popularity as corporations recognise the long-term benefits and advantages of this strategy. Operating in a continuous changing business environment (Cornescu et al, 2004; Toma, 2013; Toma and Marinescu, 2015a), they add effective management (Toma, 2008a; Toma and Marinescu, 2015b; Grădinaru et al, 2020) and gifted leadership (Toma et al, 2014; Marinescu and Toma, 2015b; Toma et al, 2020a; Toma et al, 2020b; Toma, 2024a), visionary strategic thinking (Toma et al, 2016a; Toma, 2024b) and planning (Toma et al, 2016b), competitive business and corporate strategies (Toma and Marinescu, 2013; Toma and Grădinaru, 2016; Toma, 2023a; Toma, 2023b), implement sustainable business models (Toma and Marinescu, 2012; Toma and Tohănean, 2018; Tohănean and Toma, 2018; Toma and Tohănean, 2019; Tohănean and Toma, 2024a), demonstrate an entrepreneurial minset (Toma et al, 2017; Toma, 2019; Catană et al, 2020; Toma et al, 2021; Toma, 2023c), and are socially responsible (Toma, 2008b; Marinescu et al, 2010a; Toma et al, 2011a; Toma et al, 2011b; Toma, 2012). Moreover, in order to face tougher competition worldwide, corporations implement in their business processes and activities numerous methods and techniques such as quality (Toma, 2006a; Toma, 2006b; Toma and Naruo, 2009; Toma et al, 2012) and lean management (Naruo et al, 2007; Marinescu and Toma, 2008; Toma et al, 2022), agile principles (Toma, 2023d), organizational learning and training (Toma, 2011; Marinescu and Toma, 2013; Toma and Hudea, 2024), Six Sigma (Toma, 2008c), Balanced Scorecard (Toma et al, 2010), marketing mix (Marinescu et al, 2010b; Grădinaru and Toma, 2017; Catană and Toma, 2021), customer experience (Toma and Catană, 2021a; Toma and Catană, 2021b), creativity and innovation (Toma et al, 2013; Marinescu et al, 2016; Marinescu and Toma, 2017; Tohănean and Toma, 2024b).

3. Methodology

This study utilises a qualitative research style that combines a comprehensive literature review alongside a thematic assessment. The authors gathered and assessed external texts on the subject from previously published books, articles, and academic publications. The search parameters encompassed circular economy, competitive advantages, sustainability, and Sustainable Development Goals. The theme analysis revealed notable tendencies, encompassing technological issues, edge in competition, and sustainability objectives. The inquiry initiated with an introduction and discourse on the ideas, which were then included and examined in the results section to achieve the research's specified purpose. This research's methodology is based on a thorough review carried out by a cohort of esteemed experts in the same field of study.

4. Results and discussion

The circular economy has garnered increased attention from policymakers, scholars, and researchers due to the proliferation of frameworks, initiatives, and laws within the EU. Although circularity has become a prominent subject, the literature still exhibits a deficiency of understanding about the monitoring of progress towards it (De Pascale et al, 2021). A thorough examination of advancements in the circular economy model that maintains equilibrium across economic, social, and environmental dimensions is absent from the existing circular economy research (Tan et al, 2022).

The lack of consensus among scientists and policymakers over rules for evaluating progress towards circularisation complicates and renders this process more complex (Giannakitsidou et al, 2020). Understanding the economic dynamics of circular economy implementation is essential for formulating more focused strategies and policies aimed at evaluating the extent of circular economy achievement through the establishment of specific objectives, indicators, and measures (Marques and Teixeira, 2022). Despite the use of several methodologies to assess the shift to a circular economy, particularly concerning waste generation and management, a standardised instrument that encompasses all pertinent issues remains absent (Voukkali et al, 2023).

A more robust structure is required for broader corporate implementation to support the adoption of the Circular Economy model. The authors emphasise the previously articulated notion that enhanced collaboration between the corporate sector and policymakers is essential to promote broader exposure to the concepts outlined in the model and to motivate more stakeholders to support the transition. Currently, the majority of enterprises that successfully adopt this model are those engaged in products manufacturing, since this sector facilitates the effective implementation of the model, provided that the appropriate resources and assets are accessible.

5. Conclusions

In short, the authors contend that the circular economy is a framework that can confer a competitive advantage to firms if effectively integrated into their business models; however, this necessitates systemic changes within organisations, industries, and the economy, propelled by significant changes in social norms, values, and behavioural patterns. They are interested in further investigating the more practical side of implementing a circular economy as a long-term strategy in future publications.

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