Creating Value via Circular Economy in Tourism Sector

Subjects: Others

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Among major international research and practice issues, the issue of the circular economy has emerged recently as “an alternative economic paradigm” to address the current needs of the present and to search for innovative solutions for the future. Sustainable tourism development has emerged as a critical issue for future development trajectories with the aim of boosting the efficient use of natural resources while producing less waste and addressing the challenges of climate change and biodiversity. A new economic concept known as the “circular economy” (CE) has emerged recently to address social and environmental sustainability issues that increasingly arise in tourism research and its practice. CE is replacing the traditional “take, make, dispose” economic model, which has become highly unsustainable.

circular economy tourism sector value creation sustainability

1. Introduction

Tourism researchers worldwide are now debating strategies, policies, and new business models to assist in the recovery of the sector from the disastrous effects caused by the COVID-19 situation on the socio-politic and economic situation (Zenker and Kock 2020). What resonates with most practitioners and researchers is to radically rethink and redesign the competitive strategies of the sector for recovery and renewal (Gössling et al. 2020; Hall et al. 2020; Sigala 2020).

In the current scenario, sustainable tourism development has emerged as a critical issue for future development trajectories with the aim of boosting the efficient use of natural resources while producing less waste and addressing the challenges of climate change and biodiversity (UNWTO 2020). A new economic concept known as the “circular economy” (CE) has emerged recently to address social and environmental sustainability issues that increasingly arise in tourism research and its practice (Manniche et al. 2021; Geissdoerfer et al. 2017). CE is replacing the traditional “take, make, dispose” economic model (Urbinati et al. 2021, p. 1), which has become highly unsustainable.

In recent years, there has been a significant surge in interest and engagement with the concept of the circular economy among researchers and practitioners. The circular economy has gained traction across various domains, and different managerial journals are now focusing on exploring the principles of the circular economy, their impact on new business models, and the dynamics of value creation and capture (Antikainen and Valkokari 2016; Bocken et al. 2016; Lewandowski 2016; Centobelli et al. 2020).

The literature related to the tourism domain has also increased due to the negative impacts of its activities on the community and environment.

2. Creating Value via the Circular Economy in Tourism Sector

2.1. Creating Value with the Circular Economy

Recently, the term CE has become the keyword for researchers, policymakers, and managers, indicating the significant attention that society is dedicating today to new approaches that seek to transform the way people use resources radically. It does this by replacing previous linear production and consumption models with closed production systems that place more emphasis on time by reusing and recycling and keeping resources in a loop of production and usage (EMF 2015). CE consists of a new economic model that is associated with significant competitive advantages for businesses as well as benefits to the environment (EMF 2015). The relevance of this new economic model is also evidenced by EU strategies and policies, such as the European Green Deal that aims to transform the EU into a modern, resource-efficient, and competitive economy, as well as EU policy and recovery packages (EU Commission 2020).

The academic research has, so far, dedicated significant attention to the conceptualization and definition of the main features and dimensions of the CE paradigm. There are different definitions reported in the literature that aim to grasp the main features and characteristics of CE.

EMF (2015), defines it as follows: “CE is an industrial system that is restorative or regenerative by intention and design. It replaces the ‘end-of-life’ concept with restoration, shifts towards the use of renewable energy, eliminates the use of toxic chemicals, which impair reuse, and aims for the elimination of waste through the superior design of materials, products, systems, and, with this, business models”, thus highlighting the relevance of “reuse” and “recycle” of resources and products as well as “re-duction” of environmental and social impacts.

One of the most complete definitions is the one of Kirchherr et al. (2017), that describes it as “an economic system that is based on business models which replace the ‘end-of-life’ concept with reducing, alternatively reusing, recycling, and recovering materials in production/distribution and consumption processes, thus operational at the micro-level (products, companies, consumers), meso level (eco-industrial parks) and macro level (city, region, nation and beyond), to accomplish sustainable development, which implies creating environmental quality, economic prosperity, and social equity, to the benefit of current and future generations”.

In addition, researchers have reserved significant attention for analyzing how firms are innovating their business practices, strategies, and models to implement CE with the ultimate goal of achieving improved production effectiveness and business performance in a sustainable and cost-efficient mode (Geissdoerfer et al. 2020).

Geissdoerfer et al. (2020), defined four main strategies that firms could adopt for redesigning and innovating the way how they create, deliver, and capture value consisting of Cy-cling; Extending; Intensifying, and Dematerializing strategies (Parida et al. 2019; Bressanelli 2018; Lüdeke-Freund et al. 2019).

These strategies could be used by firms to reuse, repair, and increase the lifetime of products and materials, intensify resource loops, as well as increase collaborative consumption services.

On the other hand, other researchers have focused on analyzing how the implementation (Lüdeke-Freund et al. 2019; Centobelli et al. 2020) of CE practices impacts value-creation and -capturing processes (Centobelli et al. 2020). For example, Urbinati et al. (2021), argued that there are different new and innovative managerial practices that firms could activate for creating, capturing, and delivering value through CE business models along two main dimensions:

Dimension 1—addresses how firms design the value network. This means how firms organize and structure key resources, activities, and supply chain relationships with the stakeholders to create and enhance value.

Dimension 2—relates to how firms design innovative value prepositions and interfaces to capture value. The authors highlight that there are different options to be adopted for redesigning a new value network, such as:

- Initiatives oriented toward the reduction in greenhouse gas emissions and negative environmental impacts (Sassanelli et al. 2019; Su et al. 2013), recognized as Energy efficiency initiatives;
- Initiatives oriented toward new practices and capabilities that contribute to enabling sustainable loops by using natural, recyclable, sustainable, and eco-friendly materials and by activating new design practices for enabling product and component circularity (recycle, reuse, disassembly) (Sassanelli et al. 2019), recognized as Design for "X" initiatives;
- Enhanced awareness and systemic view initiatives aimed to endorse direct participation of supply chain stakeholders in value-creation processes and to create shared value and trust by implementing operative communication (Ghisellini et al. 2016; Singh and Ordoñez 2016);
- Redesign the customer value proposition and interface initiatives by activating new modalities of bringing the products to users such as leasing or renting products, pay-per-use activities, and by offering complementary services for products with the aim of broadening their lifecycle through, e.g., repair and maintenance services, ND take-back programs (Kunz et al. 2018; Stahel 2016);
- Promotion and communication initiatives aimed at informing customers about the new value proposition of the business through websites and social media, as well as directly by staff, with the aim of directly involving them in CE themes (Baxendale et al. 2015).

However, activating such new practices requires the redefinition of business and supply chain processes, as well as new business practices to reinvent the way firms create, transfer, and capture value (Centobelli et al. 2020) by reducing the environmental impact of materials and products, minimizing the need for virgin resources and distribute resources in an equal and fair mode (EMF 2014).

2.2. CE and ESG Goals

The overarching objective of a circular economy (CE) is to achieve a harmonious balance among people, the planet, and economic growth (profit) (Elkington 1997). The CE concept is deeply rooted in environmental economics and employs scientific principles to pursue sustainable goals (Mentink 2014). While sustainability and circularity are often used interchangeably, they have distinct objectives, origins, and motivations.

Sustainability aims to achieve "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland 1987). On the other hand, the concept of the circular economy focuses on an economic model that is restorative and regenerative by design, aiming to retain the maximum value from products, components, and materials (EMF 2015).

Einarsson and Sorin (2020), argued that sustainability is a broader concept that encompasses economic, social, and environmental benefits at the societal level, while the circular economy primarily pertains to economic actors who implement the new production and consumption system. Therefore, the circular economy is seen as a necessary process and an intrinsic foundation for a radical transition towards sustainability (Sengers et al. 2016) and for achieving sustainable development goals. In other words, Sustainability is the goal; circularity is a means. Hence, the circular economy concept embraces and complements the established notion of sustainability, reinforcing its relevance.

It is important to note that transitioning to a circular economy requires rethinking and redesigning growth, focusing not only on positive economic impacts but also on broad societal benefits (Taylor 2021). Moreover, it involves the utilization of advanced and disruptive technologies to reduce the overall demand for raw materials and maximize the value and lifespan of products (Stahel 2013). Such new practices necessitate the redefinition of business and supply chain processes and the adoption of novel business practices to reinvent how firms create, transfer, and capture value (Centobelli et al. 2020).

2.3. Activating CE in Tourism

To thrive in the post-COVID-19 era, it is crucial for scholars and researchers to steer tourism development strategies toward sustainable resource utilization by introducing new ideas, models, approaches, and paradigms (Del Vecchio et al. 2020; Einarsson and Sorin 2020; Romagosa 2020; Rodríguez et al. 2020; Sigala 2020). The Circular Economy (CE) approach is gaining popularity as a guiding principle for achieving a sustainable and resilient tourism ecosystem (Einarsson and Sorin 2020, p. 4). Despite the tourism industry's significant contributions to socio-economic growth, including GDP, jobs, and economic development, it also has a range of negative environmental and social impacts, such as pressure on the natural capital and local resources, harm to ecological habitats, the utilization and consumption of resources such as land, buildings, furniture, vehicles, fossil fuel, food, and textiles, as well as contributing to global greenhouse gas emissions (Einarsson and Sorin 2020; Rodríguez et al. 2020).

The tourism industry's consumption and production model is primarily based on a linear take-make-dispose model, relying heavily on vast quantities of raw and natural resources (Manniche et al. 2021). However, researchers are exploring the potential for the tourism industry to contribute to the CE, given its complexity, heterogeneity, interdisciplinary nature, and interconnectedness with various indirect value chains, activities, and sectors (Del Vecchio et al. 2020). Consequently, researchers are now focusing on exploring the CE for tourism by examining the different practices and mechanisms employed by tourism businesses.

Recent studies have highlighted the significance of transitioning toward circular production and consumption modes for different stakeholders in the tourism sector, including food production, transportation, building, and construction (Pamfilie et al. 2018; EMF 2015). Key practices that support circular tourism include recovery, reuse, redevelopment, valorization, and regeneration (Menegaki 2018).

Many CE practices and strategies can be implemented by tourism businesses and destinations to create a more sustainable experience for all stakeholders, reducing natural resource consumption and negative social and environmental impacts (Rodríguez et al. 2020). Examples of accommodation structures, such as the Greet hotel brand by Accor, Crowne Plaza Copenhagen Towers, and Green Solution House, that have implemented initiatives that focus on

building material recycling, asset renovation, in-place material, and workforce utilization, modular and reusable raw material use, modular design, flexible partitioning solutions, and preference for easily repairable, upgradable, and customized materials and products (Einarsson and Sorin 2020; Manniche et al. 2021). For example, the study by (45) highlighted the use of renewable energy sources in Greek hospitality structures, including thermal, geothermal, and biomass-generated energy. Girard and Nocca (2017) provided evidence of the practices and initiatives undertaken by Italian hotels to reduce CO_2 emissions and create a differentiation strategy, including the use of natural gas, electric buses, and zero-km menus.

Scholars have focused on analyzing how CE can contribute to sustainable tourism by creating new opportunities for long-term recreation activities, reducing negative impacts on the environment, and attracting green customers. (Ma et al. 2018; Merli et al. 2019). Other studies have focused on understanding the customer perception and interest in circular economy practices, such as the effect of green practices on customer satisfaction and purchasing intentions (Kim et al. 2017; Yusof et al. 2017) or the relationship between green practices and profitability (Yang et al. 2015).

Research has shown that hospitality businesses are primarily focused on sustainability activities and transition to circular practices mainly within reduction strategies (38). Studies have also aimed to identify best practices, strategies, and guidelines for transitioning toward a circular model in hospitality companies, such as Rodríguez-Antón and Alonso-Almeida (2019), who analyzed CE practices in four European hotel chains and Menegaki (2018), who examined the extent hotels in Greece.

For instance, Pamfilie et al. (2018), analyzed the deployment of CE practices by hotel establishments in Romania, viewed from the perspective of industry managers. Florido et al. (2019), provided a roadmap for transforming a tourist destination into a CE model, while Manniche et al. (2021), studied how CE, natural capital, and resilience concepts are being utilized by scholars and companies in the tourism and hospitality sector in their business operations and development plans.

Food services and restaurants are also employing reusability, recycling, and reduction practices in the production, packaging, and waste management of food (Alhola et al. 2017; Privitera 2016). At a macro level, there are a variety of initiatives, policies, and interventions in place to promote and support the development of CE. Examples include the European project Ecobnb, which brings together eco-friendly accommodation structures, the Eco Leader Award initiated by TripAdvisor to acknowledge sustainable infrastructures, and the Booking Booster program launched by Booking, which provides financial support and training opportunities for companies involved in sustainable tourism.

Despite the growing number of scientific works on CE in tourism, research on circular tourism is still in its infancy. Further research is required to comprehend the approaches to adopting CE principles, the challenges and barriers businesses face during the transition, and to identify best practices (Rodríguez et al. 2020; Manniche et al. 2017).

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