Journal of Cleaner Production 500 (2025) 145177

Contents lists available at ScienceDirect

Journal of Cleaner Production

journal homepage: www.elsevier.com/locate/jclepro

A sustainability perspective for sharing economy business model and its unintended effects

Mohammad Hossein Foroozanfar [a], Narges Imanipour [b], Seyed Mojtaba Sajadi [c,*], Mohammad Reza Habibi [d]

[a] Department of Tourism and Hospitality, Faculty of Tourism, Higher Education Complex of Bam, Bam, Iran
[b] Faculty of Entrepreneurship, University of Tehran, Tehran, Iran
[c] Operations and Information Management Department, Aston Business School, Aston University, Birmingham, UK
[d] Department of Marketing, College of Business and Economics, California State University, Fullerton, CA, USA

ARTICLE INFO

Handling Editor: Cecilia Maria Villas Bôas de Almeida

Keywords:
Sharing economy
Business model
Sustainability transition
Unintended effect
Thematic analysis
Systematic literature review

ABSTRACT

The sharing economy business model (SEBM) creates a new type of business that offers goods and services more efficiently than traditional exchange markets. This study conducts a systematic literature review complying with the PRISMA protocol to enhance our comprehension of the SEBM through three key contributions. First, it performs a descriptive analysis of the included publications to offer the overall picture of publication outlets, country and sector contexts, and the methodological designs. Second, and more importantly, it identifies and categorizes the negative and positive unintended effects of SEBMs through a sustainability perspective by performing two thematic analyses that encompass themes and subthemes. And finally, it develops an integrated framework for SEBM and its unintended effects, incorporating both dimensions of the business model and pillars of sustainability. This framework facilitates the discussion of findings, identifies gaps in the literature, and provides directions for future research.

1. Introduction

The sharing economy (SE), or collaborative economy, is a new business approach that delivers more affordable and accessible products and services (Belk, 2014; Mont et al., 2020). Customers, service providers, and platform providers are the three principal SEBM actors (Benoit et al., 2017; Xu et al., 2021). SEBM delivers substantial sustainability benefits (Curtis and Mont, 2020; Habibi et al., 2017). Both Uber and Rideshare, for example, supply transportation services by utilizing the underutilized assets of ordinary car owners. They allow users to travel on short or long trips at cheaper prices than other means of transportation, including car ownership. Airbnb and Couchsurfing provide cheaper and more unique alternatives to hotel rooms for travelers (Davidson et al., 2018). Therefore, the effects of the SEBM on sustainability have been widely documented in the relevant literature (Hahn et al., 2020; Nozari et al., 2021). Some scholars suggested that the SEBM is a possible new path to sustainability (Claudelin et al., 2022; Faraji et al., 2024; Heinrichs, 2013; Tura and Laukkanen, 2023), while others are more skeptical (Geissinger et al., 2019; Jemio et al., 2024; Martin, 2016). This grants more probing into the sustainability aspects and unintended effects of SEBM, which are mostly unknown (Curtis and Mont, 2020; Mock and Wankat, 2024; Öberg, 2024; Plepys and Singh, 2019).

It frequently appears that the SEBM's effects are favorable for sustainability, assisting in lowering resource consumption by granting access to underutilized resources and lowering greenhouse gas emissions (Curtis and Mont, 2020; Dabbous and Tarhini, 2021; Heinrichs, 2013; Martin, 2016; Nozari et al., 2021). Frenken and Schor (2019) argue that this approach only considers the 1st order effects from a sustainability perspective, asserting that sharing an underutilized product generates income as an economic mechanism. Thus, from a sustainability viewpoint, the impacts of SEBM yield gains are regarded as positive unintended effects (Andrew and Pigosso, 2024; Carlborg et al., 2023; Dabić et al., 2024; Guzzo et al., 2024; Jemio et al., 2024). Conversely, the affordability associated with the utilization of shared goods has the potential to incentivize more consumption through negative unintended

This article is part of a special issue entitled: Reimaging Sharing Economy published in Journal of Cleaner Production.

* Corresponding author. Operations and Information Management Department, Aston Business School, Aston University, Birmingham, B4 7ET, UK.
E-mail addresses: mh.foroozanfar@bam.ac.ir (M.H. Foroozanfar), nimanip@ut.ac.ir (N. Imanipour), s.sajadi@aston.ac.uk (S.M. Sajadi), mhabibi@fullerton.edu (M.R. Habibi).

https://doi.org/10.1016/j.jclepro.2025.145177
Received 28 March 2024; Received in revised form 9 February 2025; Accepted 28 February 2025
Available online 1 March 2025

effects (Carlborg et al., 2023; Faraji et al., 2024; Gössling and Michael Hall, 2019; Singh et al., 2018). The negative unintended effect refers to the phenomenon wherein improvements in resource productivity, including reduced ownership, do not result in decreased usage. In contrast, they often end up in heightened consumption, thereby jeopardizing sustainability initiatives, notwithstanding that these kinds of unintended effects may be few and occur in rare cases due to behavioral responses via economic or psychological mechanisms (Akbari et al., 2021; Andrew and Pigosso, 2024; Garus et al., 2024; Guzzo et al., 2024; Richter et al., 2023).

Extensive literature exists regarding unintended effects stemming from consumer behavior (Garus et al., 2024; Hertwich, 2005; Kim et al., 2020; Richter et al., 2023) and its other forms (Andrew and Pigosso, 2024; Carlborg et al., 2023; Guzzo et al., 2024; Jemio et al., 2024).[1] Few studies have examined the unintended effects that may occur in the SEBM directly, despite practitioners' and academics' rising interest in this topic (Chatterjee et al., 2023; Claudelin et al., 2022; Garus et al., 2024; Henry et al., 2021; Jemio et al., 2024). The unintended effects of SEBM specifically highlight additional income gained for sharers resulting from enhanced efficiency. The demand for a product or service escalates as a result of its reduced price. Moreover, the enhanced efficiency leads to cost reduction, freeing up revenue for the allocation to other goods and services (Jemio et al., 2024; Plepys and Singh, 2019). The problem occurs when the reallocation of these incomes induces unintended effects, leading to heightened consumption of goods and services and increased investments in capital or financial assets, thus threatening sustainability efforts across economic, environmental, and social dimensions. This encourages a more comprehensive exploration of the sustainability dimensions and unintended effects of SEBM, which have largely been overlooked (Andrew and Pigosso, 2024; Curtis and Mont, 2020; Faraji et al., 2024; Foroozanfar et al., 2024; Jemio et al., 2024; Plepys and Singh, 2019). This study reveals a gap in our understanding of unintended effects within the context of SE. Additionally, it is necessary to distinguish both negative and positive unintended effects for SEBMs. Furthermore, there is a notable lack of classification regarding unintended effects. So, we classify SEBM's negative and positive unintended effect according to sustainability pillars, encompassing economic, environmental, and social dimensions. Furthermore, descriptive analyses of the included publications are essential for our systematic literature review to provide a comprehensive and detailed analysis of SEBM with regard to publication outlets, geographical and sectoral contexts, and methodological designs. Literature review studies typically present supplementary information regarding the literature and selected papers to enhance readers' comprehension. This research seeks to shed light on SEBM and its unintended effects by addressing the questions listed below.

RQ1: What are the descriptive analyses of the included publications of this systematic literature review?
RQ2: What are the classifications of the negative and positive unintended effects of SEBM from a sustainability perspective?
RQ3: What is the future research agenda for the unintended effects of SEBM and its impacts on sustainability?

We conducted a systematic review of the literature, which is supported by the PRISMA protocol, to address the above questions. This research contributes to a better understanding of the SEBM in three ways. First, we conducted a descriptive analysis of included publications. The analysis encompassed publication outlets, country and sector contexts, as well as the methodological designs of the included publications. Second, we classify the negative and positive unintended effects of SEBMs from the perspective of sustainability by conducting two thematic analyses, which include themes and subthemes. Third, we develop an integrated framework for SEBM and its unintended effects that encompasses both business model dimensions and sustainability pillars. This framework supports discussion of findings, recognition of gaps in the literature, and suggestions of future research directions.

We structure the remainder of the study as follows: Section 2 describes the theoretical background. Section 3 outlines the research methodology. Section 4 provides a descriptive analysis of the included publications. Section 5 addresses the outcomes of two thematic analyses and develops an integrative framework for SEBM. Section 6 discusses the implications, limitations, and future research directions, and Section 7 concludes the study.

2. Theoretical background and literature review

2.1. Sustainability transition theory

Multiple theories have been utilized in SE (Hossain, 2020). The theory of sustainability transition is highly applicable to SE (Claudelin et al., 2022; Geissinger et al., 2019; Govindan et al., 2020; Laukkanen and Tura, 2020; Öberg, 2024; Tóth et al., 2022).The fundamental purpose of this theory is to define how sustainable activities function well and who is engaged (Martin, 2016; Mont et al., 2022). Sustainability transitions are complex, extended, and vital transformation processes wherein entrenched societal cultures, environmental structures, and practices evolve toward more sustainable alternatives, stemming from the co-evolution of the economy, society, and the environment (Hofmann, 2019; Rogge and Reichardt, 2016). Sustainability transitions transpire as we transition from unsustainable to sustainable production-consumption patterns. The transformation involves altering technology, business, sector value chains, distribution methods, user behaviors, values, and mindsets (Aagaard et al., 2021; Neesham et al., 2023). Sustainability transitions denote a multifaceted and protracted process that encompasses a network of diverse players functioning at different levels within a system (Hernández-Chea et al., 2021). Mixed findings exist on the role of the SEBMs in sustainability, rendering sustainability transition theory highly pertinent to the SE contexts (Faraji et al., 2024; Hossain, 2020; Martin, 2016; Öberg, 2024). We built on sustainability transition theory to add to the body of SEBM knowledge.

2.2. SEBM and sustainability

It is asserted that the SEBM promotes sustainability (Heinrichs, 2013; Martin, 2016; Mont, 2004). Facilitating access to products as opposed to ownership leads to reducing net consumption (Belk, 2014; Curtis and Mont, 2020; Kraus et al., 2020; Lehner et al., 2016; Mignon and Bankel, 2022; Schoonover et al., 2022), lowering net input, improving material efficiency, and generating other social and economic benefits. This could reduce the use of resources and greenhouse gas emissions (Acquier et al., 2017; Hamari et al., 2016). So, SEBM provides considerable sustainability benefits (Curtis and Mont, 2020; Dabić et al., 2024; Foroozanfar et al., 2024; Habibi et al., 2017; Mont et al., 2023; Zimmermann and Palgan, 2024). Both Uber and Rideshare offer transportation services by utilizing the underused assets of regular car owners. They let consumers travel short or large distances at far lower prices than alternative transportation methods and are markedly more economical than car ownership (Hang et al., 2019; Mittendorf, 2017; Nozari et al., 2021). Airbnb and Couchsurfing offer tourists more affordable and maybe more intriguing accommodation alternatives than hotel rooms (Davidson et al., 2018; Dogru et al., 2020; Nieuwland and Van Melik, 2020).

Certain scholars have suggested that the SEBM could be a viable pathway to sustainability (Claudelin et al., 2022; Heinrichs, 2013; Mock and Wankat, 2024; Öberg, 2024; Plepys and Singh, 2019), but others express skepticism (Coles, 2022; Geissinger et al., 2019; Martin, 2016;

[1] Note: Research on the unintended effect has been thoroughly expressed in several journals, including *Ecological Economics, Journal of Industrial Ecology, Energy Policy, The Energy Journal, Energy Economics, and Journal of Industrial Ecology*.

Mosaad et al., 2023). Lim et al. (2021) examine and advocate for a home sharing agenda from a marketing and tourist perspective. They offer a comprehensive, retrospective analysis of the marketing and tourism factors, decisions, and results associated with house sharing via a framework-based systematic review. Their research paper provides a comprehensive overview of the theories, contexts, and methodologies employed to acquire this insight, concluding with a discourse on the existing knowledge gaps and potential strategies to address these gaps through pertinent concepts for future marketing and tourism research on home sharing. Nevertheless, the sustainability impacts and unintended effects of SEBM remain largely unexamined (Carlborg et al., 2023; Curtis and Mont, 2020; Plepys and Singh, 2019; Tura and Laukkanen, 2023).

2.3. SEBM and unintended effect

The initial notion of unintended effects primarily focused on energy efficiency improvements resulting in increased consumption over time due to reduced prices (Jevons, 1866; Santarius et al., 2016). However, the concept of unintended effects has evolved to include systemic behavioral responses to effectiveness strategies. These include approaches that aim to sustain or enhance the efficacy and productivity of materials through circular utilization, such as circular economy initiatives (Castro et al., 2022), as well as sufficiency strategies, specifically methods to curtail the overall consumption of goods and services (Andrew and Pigosso, 2024; Figge and Thorpe, 2023). The unintended effect refers to the fact that enhanced resource productivity, even via diminished ownership, results in increasing utilization and thus heightened production rather than a reduction. It is significant in considerations of sustainable consumption since an enhancement in one habit may lead to direct or indirect adverse effects in other areas (Henry et al., 2021; Hertwich, 2005; Kim et al., 2020). Direct unintended effects denote a rise in demand for a product or service resulting from its reduced price attributable to efficiency enhancements (Nash et al., 2017). Furthermore, indirect unintended effects illustrate how cost reductions from enhanced efficiency liberate income that can be reallocated to other goods and services (Jemio et al., 2024; Plepys and Singh, 2019). The extent of the unintended effect is significantly influenced by the utilization of the saved funds (Claudelin et al., 2022).

Prior studies have examined psychological elements (e.g., values, motives, and perceived barriers) that affect involvement in the SE (Guzzo et al., 2024; Hertwich, 2005; Jemio et al., 2024; Kim et al., 2020; Richter et al., 2023). Nevertheless, the more affordable lodging and transportation provided by the SEBM may lead to an increase in tourism that, conversely, detrimentally impacts the environment (Garus et al., 2024; Jemio et al., 2024). Akbari et al. (2021) highlighted unintended effects, wherein a decrease in the consumption of certain items may lead to an increase in the usage of others, thereby diminishing the overall beneficial environmental impacts. Makov et al. (2020) posited that peer-to-peer sharing of food waste would result in considerable re-spending effects from the conserved funds, thereby exacerbating overall greenhouse gas emissions (Claudelin et al., 2022).

2.4. SEBM and unintended effect for sustainability

The unintended effects of the SEBM are notable (Govindan et al., 2020; Nozari et al., 2021; Reuter, 2022). Unintended effects may have a negative impact on the sustainability of the SEBM. Existing sharing behaviors may have negative economic, social, and environmental repercussions, and net consumption may actually increase (Afghah et al., 2023; Curtis and Mont, 2020; Plepys and Singh, 2019; Schor, 2016). The problem arises when supplemental income acquired by sharers triggers unintended effects, resulting in increased consumption of energy as well as goods and services quantified by product units. Moreover, it boosts investments in capital or financial assets, hence undermining sustainability initiatives across economic, environmental, and social aspects (Jemio et al., 2024; Kim et al., 2020; Plepys and Singh, 2019). So, the issue is that SEBM fails to guarantee sustainability; it may promote some sustainable practices while also amplifying the impact of unsustainable processes (Dabbous and Tarhini, 2021; Faraji et al., 2024; Foroozanfar et al., 2024; Martin, 2016).

In the transportation industry, for instance, SEBMs may increase both employment and the availability of personal vehicles. As an unintended effect, it can reduce the motivation of travelers to use public transportation, leading to a rise in urban traffic and a worsening of environmental pollution (Davidson et al., 2018). So, the unintended effect is the phenomenon whereby a rise in resource productivity (including through less ownership) does not lead to a reduction in utilization and, consequently, production but rather an increase (Gössling and Michael Hall, 2019; Henry et al., 2021). The SEBM may have a negative impact on sustainability outcomes due to unintended effects (Curtis and Mont, 2020; Ma et al., 2018). Claudelin et al. (2022) reveal that the cheaper lodging and transportation provided by the SEBM could lead to an increase in travel that is detrimental to the environment.

On the other hand, the pertinent literature has thoroughly evidenced the beneficial unintended effects of the SEBM on sustainability (Carlborg et al., 2023; Chatterjee et al., 2023; Garus et al., 2024; Jemio et al., 2024; Nozari et al., 2021). Researchers have demonstrated that SEBM positively impacts sustainability by reducing resource consumption through access to underutilized resources and decreasing greenhouse gas emissions (Curtis and Mont, 2020; Dabbous and Tarhini, 2021; Faraji et al., 2024; Heinrichs, 2013; Nozari et al., 2021). The impact of SEBMs through the distribution of an underutilized product yields advantageous results from a sustainability standpoint. From a sustainability perspective, the effects of SEBM provide gains are considered positive unintended effects (Carlborg et al., 2023; Dabić et al., 2024; Jemio et al., 2024). So, positive unintended effects, potentially induced by the SEBM, may have manifested as economic, environmental, and social results.

Nonetheless, as highlighted in the introduction section, research on unintended effects in SE is rather scarce, necessitating a thorough understanding of unintended effects for SEBMs (Akbari et al., 2021; Garus et al., 2024; Henry et al., 2021; Jemio et al., 2024). This study identifies a gap in understanding unintended effects in relation to SE. Furthermore, it is essential to differentiate between both negative and positive unintended effects for SEBMs. Moreover, the classification of unintended effects is notably inadequate. We categorize SEBM's negative and positive unintended effects based on the pillars of sustainability, which include economic, environmental, and social aspects.

3. Methodology

This study has developed three basic questions, which are elucidated in the introduction. According to Snyder (2019), a systematic literature review may be the most efficient method for tackling a wide range of research questions. Especially in inter-disciplinary study domains like business studies, systematic reviews are necessary (Kolotylo-Kulkarni et al., 2021; Moher et al., 2009; Snyder, 2019). To assure the correctness and dependability of the review, we performed a literature search based on publication inclusion criteria. We described the information flow using the PRISMA protocol (Moher et al., 2009) as shown in Fig. 1. The four stages of this protocol-identification, screening, eligibility, and inclusion-offer a lucid outline for the review approach (Lim et al., 2021).

3.1. Identification

Scopus and Web of Science were the key databases searched during the identification phase to ensure the largest possible coverage of the relevant papers. Scopus was chosen for triangulation due to its width and capability, despite the Web of Science's reputation as a credible source. No time restriction was imposed. Before January 2024, every publication was examined for search ability. We conducted a search of the scientific literature using keywords extracted from titles, abstracts,

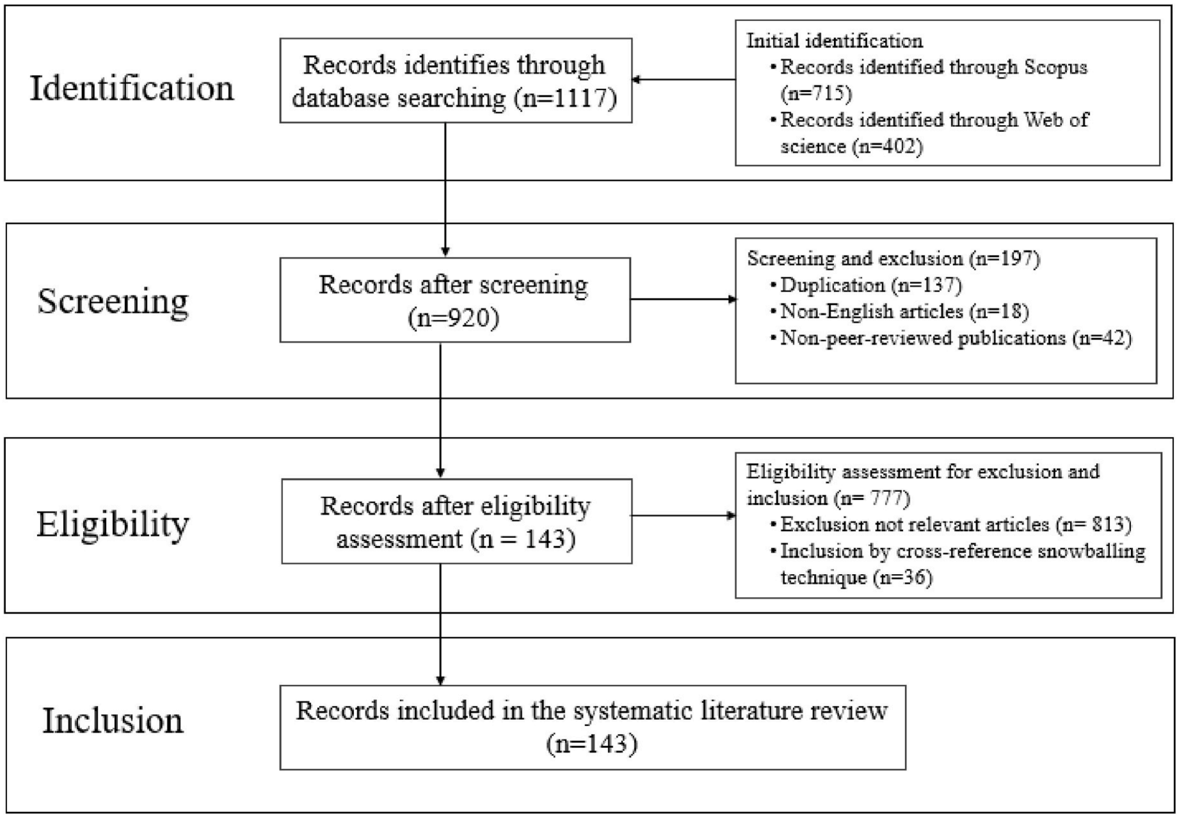

Fig. 1. PRISMA protocol.

and keywords. We did a literature search utilizing the keywords "sharing econom*" OR "collaborative consumpt*" OR "platform econom*" OR "peer-to-peer econom*" AND "business model*" AND "sustainab*". Our search did not use the term "unintended effect" as a distinct keyword. Researchers have utilized various terminologies to describe the unintended effect in their studies (Andrew and Pigosso, 2024), such as impact (Foroozanfar et al., 2024), externality (Griffiths et al., 2019), unintended consequence (Andrew and Pigosso, 2024), direct and indirect effects (Henry et al., 2021; Kim et al., 2020), rebound effect (Garus et al., 2024), drawback (Jemio et al., 2024), contagious effect (Schaefers et al., 2016), side effect (N. Bocken et al., 2013), downside (Henry et al., 2021; Schor, 2016), domino effect (Schaefers et al., 2016), and backfire effect (Carlborg et al., 2023). So, to address RQ2 and incorporate the term unintended effect into our systematic literature review, we conduct an in-depth review in full text of all included papers to identify and classify both the negative and positive unintended effects of SEBM. Finally, the original Scopus and Web of Science searches yielded a total of 1117 results.

3.2. *Screening*

We employed three specific criteria during the screening phase. We exclusively include peer-reviewed journals to ensure a high standard of publication. As a result, we excluded 42 non-peer reviewed publications. Additionally, we excluded 18 publications not written in English to ensure accurate interpretation. We also excluded 137 duplicates from our preliminary searches on Scopus and Web of Science. Consequently, the implementation of these exclusion criteria resulted in the removal of 197 scientific papers. The screening process resulted in the retention of 920 publications.

3.3. *Eligibility*

Content relevance constitutes the fundamental criterion of the eligibility phase (Lim et al., 2021; Moher et al., 2009; Tedja, Al Musadieq, Kusumawati, & Yulianto, 2024). We meticulously analyzed the full text of each publication that successfully underwent the screening phase to ensure the inclusion of only papers directly pertinent to the research questions of this study. Following this process, we deemed a total of 813 papers ineligible. We enhanced the final selection of articles by utilizing the cross-reference snowballing method to ensure the inclusion of pertinent publications. Consequently, 36 supplementary papers were considered suitable for inclusion. We replicated this methodology to minimize human error and enhance reliability (Danglot et al., 2019; Foroozanfar et al., 2022; Hiebl, 2023). Finally, the eligibility verification process disqualified 777 articles, leaving 143 papers for the eligibility confirmation process.

3.4. *Inclusion*

In the inclusion phase of a review, we analyze the content of the included publications. As previously mentioned, we employed cross-reference snowballing to enhance the final selection of publications, leading to the addition of 36 additional studies. The content analysis of our review included a total of 143 publications. We outlined the analytical and coding processes in the outset of findings section. We meticulously structured and classified the included papers in an Excel spreadsheet based on certain criteria, including article title, publication year, journal name, ABS journal ranking, methodology, regional or sector background, and significant highlights. For a comprehensive list of included publications and further details, please see the online Appendix A.

4. Descriptive analysis

This section provides a descriptive overview of the 143 included publications to address RQ1. In addition, the figures and tables illustrate the key findings of the bibliometric analysis, providing a comprehensive and accurate analysis of the scientific literature on SEBM. We collected diverse profiling papers in order to analyze publication outlets, country and sector contexts, and methodological designs.

4.1. Publication outlets

With respect to the sources of publication, it was observed that the Journal of Cleaner Production exhibited the greatest number of papers. Sustainability has published a noteworthy quantity of papers, amounting to a total of 11. The next most prolific journals following these two were the Journal of Business Research, Technological Forecasting and Social Change, and Business Strategy and the Environment. Table 1 presents a list of academic journals that have published a minimum of two papers, along with their corresponding ABS (Association of Business Schools Academic Journal Quality) ranking. There exists a considerable assortment of journals in our included publications that publish articles pertaining to the field of SEBM, with a total of 63 distinct journals identified. Each of these scholarly journals has made a substantial contribution to the existing knowledge in this particular area of study. The aforementioned outcome suggests that the subject matter in question is a multidisciplinary research area that encompasses several scholarly publications.

4.2. Country and sector context

Fig. 2 illustrates the distribution of studies by country. It is noteworthy that we disregard conceptual papers and systematic literature reviews. We did not include studies in which the country's name was not disclosed or specified. It was observed that a majority of the papers underwent examination in multiple countries. China, as a distinct country, contributes the most to the literature, with ten papers. Countries that have made only one contribution are categorized in a cluster referred to as "Other countries". The aforementioned countries comprise Iran, Korea, Latvia, Lithuania, Canada, Taiwan, Australia, South Africa, Malaysia, Finland, Switzerland, and Sweden.

The distribution of studies by sector is depicted in Fig. 3. The outcomes reveal that the majority of research was conducted across multiple sectors. The literature indicates that transportation, encompassing car sharing (9), bike sharing (7), and ride sharing (6), is an extensively researched area, with a cumulative total of 22 papers, whereas seven were conducted in accommodations. Sectors that have made singular contributions are classified within a cluster, typically marked as "Other sectors". This cluster includes food, industrial SME, charging infrastructure, architecture, electricity, home sharing, energy, agriculture, household goods, and a crowdsourcing platform.

Table 1
Publication outlets with at least two papers.

Journal	ABS	Number
Journal of Cleaner Production	2	22
Sustainability	–	11
Journal of Business Research	3	10
Technological Forecasting & Social Change	3	6
Business Strategy and the Environment	3	6
R&D Management	3	4
Business horizons	2	3
International Journal of Hospitality Management	3	3
Journal of Marketing Theory and Practice	2	3
Management Decision	2	3
Annals of Tourism Research	4	2
Creativity and Innovation Management	2	2
Current Issues in Tourism	2	2
Environmental innovation and societal transitions	–	2
Journal of Business Ethics	3	2
Psychology and Marketing	3	2
Review of Managerial Science	2	2

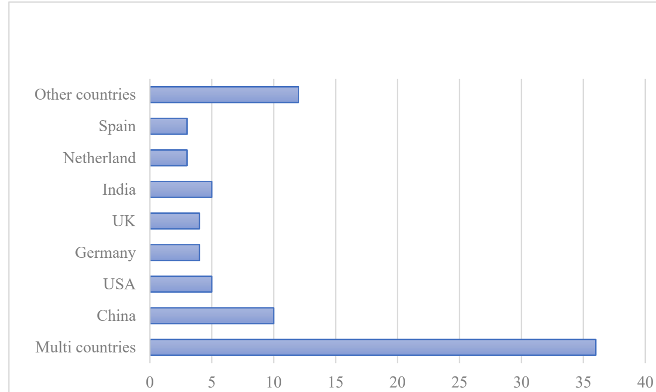

Fig. 2. Country distribution.

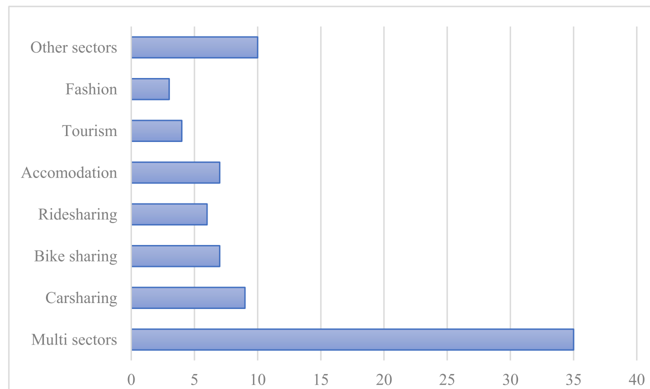

Fig. 3. Sector distribution.

4.3. Methodological design

Scholars employed diverse approaches in their methodological design. Fig. 4 presents the research article classification based on research type. The categorization of research methodologies comprises five distinct groups: literature reviews, conceptual, qualitative, quantitative, and mixed methods. The analysis illustrates an approximately equivalent distribution among three categories: conceptual (34),

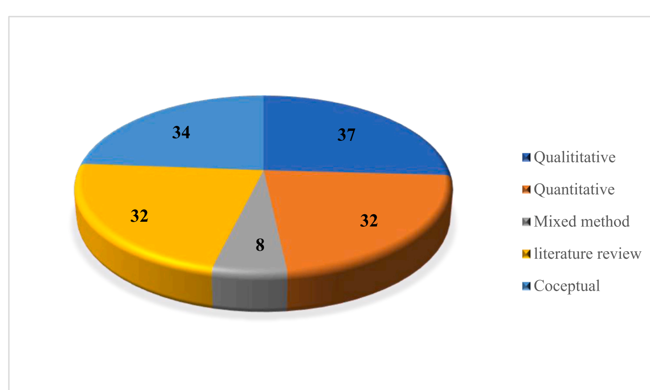

Fig. 4. Methodological classification.

qualitative (37), and quantitative (32). In addition, 32 of the 143 papers in this study are based on a literature review, and eight are mixed-method studies.

5. Finding

We employed a qualitative content analysis approach to examine our search results after profiling the research sample. In order to achieve this, three researchers conducted independent reading and coding of each of the research articles. At first, we individually coded each included publication to ensure interpretive validity and reliability (Gioia et al., 2013). We eventually performed a crosscheck of the findings and participated in a three-way discussion. We collaborated with the entire team to resolve any discrepancies. The researchers conducted a thorough analysis of the findings and aggregated them to improve the reliability of the intercoder. In this section, we elaborated on our two main findings, which include thematic analysis and an integrated framework.

5.1. Thematic analysis

This study aims to identify and classify the negative and positive unintended effects of SEBMs from a sustainability viewpoint. Two thematic analyses provide the enlightening classification of the SEBM's unintended effects to address RQ2. The sustainability pillars organize the thematic analyses. Therefore, we employ the sustainability pillars, which encompass economic, environmental, and social aspects, to classify the negative and positive unintended effects of SEBM.

5.1.1. Negative unintended effects of SEBM

Our initial thematic analysis identified 12 distinct negative unintended effects, which include price inflation, unequal competition, ignoring other options, excessive consumption, emissions of greenhouse gases, congestion and annoyance, overlooking employee rights, unethical behavior, trust anxiety, health and hygiene concerns, customer misconduct, and minimal interpersonal interaction. Subsequently, we categorized them into three groups corresponding to the three pillars of sustainability: economic, environmental, and social. This thematic analysis revealed that in terms of number, the social dimension, with seven negative unintended effects, exhibited the most significance compared to the economic and environmental dimensions. Table 2 presents the themes and subthemes associated with negative unintended effects. We classify all negative unintended effects into three sustainability categories and provide the following explanations.

5.1.1.1. Negative economic unintended effects. Customers are worried about price inflation and dynamic pricing. This entails changing pricing in response to changes in supply or demand. Customers often pay extra at times of high demand (Baumber et al., 2019; Buhalis et al., 2020; Griffiths et al., 2019; Habibi, 2019; Hwang, 2019; Kumar et al., 2018; Nozari et al., 2021). An example of price inflation in the tourism industry is presented by Pies et al. (2020). In this case, residents rented their apartments to travelers through Airbnb instead of providing accommodations for locals, resulting in a decrease in supply and an increase in local housing and rental costs. An increase in demand for a product or service due to a decrease in price will lead to price inflation as a negative unintended effect. Furthermore, the additional demand for a product or service may not be entirely essential for certain customers (Garus et al., 2024). Consequently, those living in poverty or at the bottom of the pyramid (BOP) cannot afford these sharing practices (Nungsari and Chuah, 2021; Öberg, 2024; Qureshi, Bhatt and Shukla, 2021b; Wang et al., 2022). Therefore, this negative unintended effect undermines sustainability from an economic standpoint.

Several SEBM studies (Acquier et al., 2019; Buhalis et al., 2020; Dogru et al., 2020; Frenken and Schor, 2019; Klarin and Suseno, 2021; Luo et al., 2021; Sainaghi et al., 2021) reveal unfavorable consequences

Table 2
Thematic analysis for negative unintended effects of SEBMs on sustainability.

	Theme	Subthemes	References
Negative unintended effects on sustainability	Economic	• Price inflation	Baumber et al. (2019); Buhalis et al. (2020); Garus et al. (2024); Griffiths et al. (2019); Habibi (2019); Hwang (2019); Kumar et al. (2018); Nozari et al. (2021); Nungsari and Chuah (2021); Öberg (2024); Pies et al. (2020); Qureshi, Bhatt, and Shukla (2021); Wang et al. (2022)
		• Unequal competition	Acquier et al. (2019); Baumber et al. (2021); Buhalis et al. (2020); Dogru et al. (2020); Dreyer et al. (2017); Frenken and Schor (2019); Klarin and Suseno (2021); Luo et al. (2021); Nieuwland and Van Melik (2020); Sainaghi et al. (2021); Zervas et al. (2017)
		• Ignoring other options	Bellos et al. (2017); Nash et al. (2017); Schaefers (2013); Tedja, Al Musadieq, Kusumawati, and Yulianto (2024)
	Environmental	• Excessive consumption	Akbari et al. (2021); Cocquyt et al. (2020); Garus et al. (2024); Habibi et al. (2017); Jemio et al. (2024); Makov et al. (2020); Martin (2016); Nash et al. (2017); Octavia et al. (2022); Parguel et al. (2017); Plepys and Singh (2019); Roberts et al. (2023)
		• Emissions of greenhouse gases	Akbari et al. (2021); Curtis and Mont (2020); Garus et al. (2024); Melander and Wallström (2023); Nozari et al. (2021); Schor (2016)
	Social	• Congestion and annoyance	Ferjanić Hodak and Krajinović (2020); Frenken and Schor (2019); Gurran and Phibbs (2017); Hang et al. (2019); Laukkanen and Tura (2020); Mosaad et al. (2023); Nieuwland and Van Melik (2020); Plante (2019); Rong et al. (2019); Zimmermann and Palgan (2024)
		• Overlooking Employee Rights	Ciulli and Kolk (2019); Dreyer et al. (2017); Hwang (2019); Šiuškaitė et al. (2019)
		• Unethical behavior	Chatterjee et al. (2022); Chatterjee et al. (2023); Etter et al. (2019)

(continued on next page)

Table 2 (*continued*)

Theme	Subthemes	References
	• Trust anxiety	Acquier et al. (2017); Barari et al. (2022); C. Köbis, Soraperra, and Shalvi (2021); Kannisto (2017); Sainaghi et al. (2021); Schaefers et al. (2021)
	• Health and hygiene concerns	Cui and Aziz (2019); Edbring et al. (2016); Gao and Li (2020); Hossain (2020, 2021); Hwang (2019); Klarin and Suseno (2023); Li et al. (2019); Zimmermann and Palgan (2024)
	• Customer misconduct behavior	Ma et al. (2018); Schaefers et al. (2016)
	• Minimal interpersonal interaction	Escobedo et al. (2021); Frenken and Schor (2019); Gerwe et al. (2022); Henry et al. (2021); Tóth et al. (2022)

and negative unintended effects on the revenues of conventional competitors as a result of unequal competition. As an illustration, Zervas et al. (2017) found that Airbnb's business strategies as a SEBM in the tourism and accommodation sector decreased local hotel revenue by 8–10%, especially impacting budget hotels. The resource productivity associated with sharing practices creates a unique competitive strategy that results in a negative unintended effect (Dreyer et al., 2017). SEBMs can offer lower prices because of their efficiency. The local hotels are unable to compete with those prices (Baumber et al., 2021; Nieuwland and Van Melik, 2020). Therefore, this negative unintended effect reduces the revenue of local hotels and threatens the viability of traditional resident businesses. This compromises sustainability from an economic perspective.

Another potential economic unintended effect of SEBM is that it dismisses effective alternatives for customer satisfaction. Schaefers (2013) identified car sharing as a sustainable transportation mode that has the potential to attract consumers who might otherwise choose alternative transport options like public transportation. The efficiency of SEBMs results in heightened demand for repetitive products or services (Bellos et al., 2017; Nash et al., 2017). This disregard for alternative options leads to an increased production volume for a specific product or service. This adversely impacts customer satisfaction due to insufficient variety (Tedja et al., 2024). Therefore, this negative unintended effect overlooks alternative options and diminishes customer satisfaction. Furthermore, ignoring other options weakens the revenue streams of other businesses that offer products and services comparable to those of SEBMs. This may threaten the fair allocation of revenue within a certain business context.

5.1.1.2. Negative environmental unintended effects. SEBMs can apparently prevent excessive consumption while increasing social relationships within communities (Cocquyt et al., 2020). Conversely, the SEBMs are contested as a result of their negative consequences, such as encouraging overconsumption (Akbari et al., 2021; Martin, 2016; Parguel et al., 2017). Low prices and rapidly changing fashion trends stimulate a sizable amount of consumption (Cocquyt et al., 2020; Habibi et al., 2017). Excessive consumption has negative impacts through both direct and indirect effects. The direct effects indicate a boost in demand for a product or service resulting from its cheaper price (Nash et al., 2017; Octavia et al., 2022; Roberts et al., 2023). Furthermore, indirect effects reveal cost reductions stemming from enhanced efficiency, thereby releasing funding for expenditure on alternative goods and services (Jemio et al., 2024; Plepys and Singh, 2019). For instance, certain households may have more affordable and convenient access to vehicles, leading to higher usage rates and consequently greater pollution levels (Akbari et al., 2021; Garus et al., 2024). Furthermore, families that save by forgoing a personal vehicle or consumers who economize solely through food sharing may allocate their savings toward flights abroad, thereby contributing to increased air pollution (Garus et al., 2024). So, excessive consumption, as a negative unintended effect, undermines sustainability from an environmental perspective by increasing production, energy waste, and the depletion of natural and other resources.

Greenhouse gas emissions should be considered an unintended effect that indirectly harms SEBM's stakeholders (Curtis and Mont, 2020; Nozari et al., 2021; Schor, 2016). For example, if people's purchasing power increased, there would likely be a corresponding growth in demand for shared items, which would increase the emission of green gases and generate more air pollution (Akbari et al., 2021). Furthermore, in the transportation sector, an increase in individuals' purchasing power may lead to heightened demand for sharing transportation services from a SEBM (Garus et al., 2024). This trend could result in greater demand for cars, consequently contributing to increased greenhouse gas emissions (Melander and Wallström, 2023; Nozari et al., 2021; Schor, 2016). So, greenhouse gas emissions, as a negative unintended effect, compromise sustainability from an environmental standpoint.

5.1.1.3. Negative social unintended effects. SEBMs are one of the leading causes of congestion and annoyance for local communities. It has had a significant impact on the quality of life in local communities. Recent studies on this subject have switched their focus to local communities due to increased awareness of the deleterious impacts of SEBM (Ferjanić Hodak and Krajinović, 2020; Laukkanen and Tura, 2020; Plante, 2019). For instance, the negative aspect of the SEBM in tourism is a rise in the number of service providers in tourist sites, which results in reduced prices for items and services, allowing a greater number of tourists to travel to other regions. This can lead to crowding, which in turn contributes to overtourism in destinations (Ferjanić Hodak and Krajinović, 2020). Moreover, the primary negative externality linked with ridesharing is traffic congestion (Hang et al., 2019; Mosaad et al., 2023). Complaints regarding nuisance range from disturbances caused by visitors, such as loud parties and inebriated conduct, to traffic issues. (Frenken and Schor, 2019; Gurran and Phibbs, 2017; Nieuwland and Van Melik, 2020; Rong et al., 2019; Zimmermann and Palgan, 2024). Thus, according to the aforementioned examples, local communities, as a specific group, are losers in SE circumstances. This group, as a significant social capital of a society, encounters congestion and annoyance as negative unintended effects of SEBMs. This adversely impacts social sustainability.

Some SEBMs are unable to provide a reliable and employee-friendly workplace environment. Overlooking employee rights is caused by working permissions, ambiguous personal responsibility, an absence of transparency, and inadequate compensation (Ciulli and Kolk, 2019; Dreyer et al., 2017; Hwang, 2019; Šiuškaitė et al., 2019). Consequently, employees in SEBMs, as a distinct cohort, are similarly disadvantaged in SE situations. Employees in SEBMs might experience a decline in motivation to deliver shared products and services. This endangers all stakeholders of SEBM and society.

Concerns have also been raised over unethical behavior (Etter et al., 2019), which may involve the misappropriation of data, human resources, intellectual property, etc. It has been established that some participants in the SEBMs plundered the human resources, data, and intellectual property of other enterprises (Chatterjee et al., 2023). These actions are considered unethical because they are immoral and illegal (Chatterjee et al., 2022; Chatterjee et al., 2023; Lim, 2020).

Trust has greater significance in the SEBM as a result of the scarcity of direct remedies (Acquier et al., 2017; C. Köbis, Soraperra, & Shalvi, 2021). The SEBM brings its own imagined concerns (Barari et al., 2022; Govindan et al., 2020; Mont et al., 2023; Octavia et al., 2022; Schaefers et al., 2021). In this case, it represents a customer's subjective belief that there is a risk of incurring a loss in pursuit of the desired outcome. Sharing unused resources in the SE is risky and detrimental to service providers. For instance, with Uber and Airbnb, service providers must deliver services to a stranger in their own home or vehicle, which may cause harm or financial loss (Kannisto, 2017; Sainaghi et al., 2021). Thus, the SE practices show inherent risks for both client groups and service providers.

Critics have questioned the legitimacy of SEBM services in light of incidents highlighting the risks, lack of hygiene, and other issues encountered by customers (Gao and Li, 2020; Li et al., 2019). Hwang (2019) cited certain disturbing and unlawful cases of ride and home sharing. Consequently, health and hygiene issues include infrequent incidences of risk and a lack of customer safety, such as noncompliance with health and safety regulations. When individuals often share beds, transportation, and other resources, hygienic difficulties can occur (Cui and Aziz, 2019; Edbring et al., 2016; Hossain, 2020; Zimmermann and Palgan, 2024). In addition, during the recent COVID-19 epidemic, customers opted not to utilize SEBM services due to health and hygiene issues (Garaus and Garaus, 2021; Hossain, 2021a; Mont et al., 2021). Health and hygiene pitfalls may lead to reduced or non-utilization of shared services. This situation is particularly critical for BOPs and disadvantaged groups (Klarin and Suseno, 2023), thereby negatively affecting social sustainability.

Customer behavior may damage SEBMs by having an unpleasant impact on the business, a detrimental effect on other customers, and a contagious impact on the behavior of many other customers (Schaefers et al., 2016). Misconduct initially harms the service provider if business property is damaged and recovery costs are required, or if employee satisfaction, motivation, and performance are significantly diminished. In addition, the inappropriate behavior of one client may diminish the satisfaction of other customers. In contrast, disobedient customers may subtly encourage others to engage in disobedience (Ma et al., 2018; Schaefers et al., 2016). All customers suffer from this detrimental behavior due to a negative unintended impact. They might not acquire the expected products or services from a SEBM.

The social advantages of SEBMs have been questioned because they are becoming less unique and more prevalent in everyday life. Since its beginnings, the platform's capacity to facilitate connections, especially intimate ones, has diminished. As users' connections become more loose and short-lived, they become "disenchanted" (Frenken and Schor, 2019). Through optimal pricing and data processing, interactional transactions, such as neighbors helping one another, can be turned into digital platforms (Henry et al., 2021). As a result, it seems that social interaction will decline as participation in SE. SEBM promotes minimal interpersonal interaction, which undermines social (Escobedo et al., 2021; Gerwe et al., 2022; Tóth et al., 2022). This negative unintended effect threatens sustainability from a societal standpoint.

5.1.2. *Positive unintended effects of SEBM*

The second thematic analysis revealed 15 distinct positive unintended effects. We subsequently categorized them into three groups corresponding to the three pillars of sustainability: economic, environmental, and social, which serve as our themes. Table 3 outlines the themes and subthemes related to positive unintended effects. We categorized generating and distributing revenue, property value enhancement, fostering entrepreneurial activity, cost efficiency, job creation, accessibility and diversity, and brand reputation within the economic theme. We grouped environmental awareness, green and lean actions, functionality promotion, and circular orientation within the environmental theme. We categorized social value, cultural learning, frugality, and poverty alleviation as the social theme. We have provided explanations for each positive unintended effect.

Table 3
Thematic analysis for positive unintended effects of SEBMs on sustainability.

	Theme	Subthemes	References
Positive unintended effects on sustainability	Economic	• Generating and distributing revenue	Akbari et al. (2021); Buhalis et al. (2020); Chang (2020); Gössling and Michael Hall (2019); Jemio et al. (2024); Lim et al. (2021); Merino-Saum et al. (2023); Nieuwland and Van Melik (2020); Park and Armstrong (2019); Pillai et al. (2021); Plepys and Singh (2019); Qureshi, Bhatt, and Shukla (2021); Schoonover et al. (2022); Simon and Roederer (2019)
		• Property value enhancement	Buhalis et al. (2020); Coles (2022); Gurran (2018); Habibi and Kohli (2022)
		• Fostering entrepreneurial activity	Benkler (2004); Ciulli and Kolk (2019); Dreyer et al. (2017); Faraji et al. (2024); Gerwe et al. (2022); Gössling and Michael Hall (2019); Kessler (2014); Martin (2016); Qureshi et al. (2021); Zheng et al. (2021)
		• Cost efficiency	Akbar and Tracogna (2018); N. M. Bocken et al. (2014); Ciulli and Kolk (2019); Dabbous and Tarhini (2021); Foroozanfar et al. (2024); Ganapati and Reddick (2018); Geissinger et al. (2019); Laukkanen and Tura (2020); Öberg (2023); Pillai et al. (2021); Tura and Laukkanen (2023); Voytenko Palgan and Sadovska (2023)
		• Job creation	Coles (2022); Corsini et al. (2021); Gössling and Michael Hall (2019); Laukkanen and Tura (2020); Nozari et al. (2021); Perkumienė et al. (2021); Sainaghi et al. (2021); Schaefers (2013); Sutarya (2023); Wang et al. (2022)
		• Accessibility and diversity	Akbar and Tracogna (2018); Ameri et al. (2020); Carlborg et al. (2023); Dogru et al. (2020); Henten and Windekilde (2016); Mock and Wankat (2024); Nieuwland and Van

(continued on next page)

Table 3 (*continued*)

Theme	Subthemes	References
		Melik (2020); Nozari et al. (2021); Plepys and Singh (2019); Schaefers et al. (2021); Schoonover et al. (2022); Zervas et al. (2017)
	• Brand reputation	Akbar and Tracogna (2018); Barari et al. (2022); Cheng (2016); Gassmann et al. (2021); Gössling and Michael Hall (2019); Laukkanen and Tura (2020)
Environmental	• Environmental awareness	Claudelin et al. (2022); Garus et al. (2024); Hamari et al. (2016); Henry et al. (2021); Ivanova et al. (2016); Jung and Koo (2018); Makov et al. (2020); Melander and Wallström (2023); Merino-Saum et al. (2023); Nozari et al. (2021); Paundra et al. (2017); Singh et al. (2021)
	• Grean and lean actions	Andrew and Pigosso (2024); Dabbous and Tarhini (2021); Danese et al. (2018); Galdini and De Nardis (2021); Ganji et al. (2021); Garus et al. (2024); Makov et al. (2020); Melander and Wallström (2023); Silva and Morais (2021); Sinkovics et al. (2021)
	• Functionality promotion	N. M. Bocken et al. (2014); Evans et al. (2017); Geissdoerfer et al. (2018); Plepys and Singh (2019); Roberts et al. (2023); Sinkovics et al. (2021)
	• Circular orientation	N. Bocken and Ritala (2021); N. M. Bocken, De Pauw, Bakker, and Van Der Grinten (2016); Claudelin et al. (2022); De Angelis, Morgan, and De Luca (2023); Foroozanfar et al. (2022); Geissdoerfer et al. (2020); Geissdoerfer, Santa-Maria, Kirchherr, and Pelzeter (2023); Geissdoerfer et al. (2017); Goffetti et al. (2022); Mont et al. (2006); Palgan and Mont (2023); Rusch et al. (2023); Silva and Morais (2021); Suchek et al. (2021)

Table 3 (*continued*)

Theme	Subthemes	References
Social	• Societal value	Galdini and De Nardis (2021); Gerwe et al. (2022); Jemio et al. (2024); Lashitew et al. (2022); Mittendorf (2017); Pillai et al. (2021); Qureshi et al. (2018); Sinkovics et al. (2021)
	• Cultural learning	Baumber et al. (2021); Coffay et al. (2024); Escobedo et al. (2021); Foroozanfar et al. (2024); Gössling and Michael Hall (2019); Qureshi et al. (2021)
	• Frugality	Clauss et al. (2019); Corsini et al. (2021); Dabić et al. (2024); Dabić et al. (2022); Dąbrowska et al. (2019); David-West et al. (2019); Hossain (2021); Lippolis et al. (2023); Mont et al. (2019)
	• Poverty alleviation	Akbar and Tracogna (2018); Dembek and York (2022); Foroozanfar et al. (2024); Galdini and De Nardis (2021); Grimm (2022); Hamari et al. (2016); Henten and Windekilde (2016); Pillai et al. (2021); Qureshi et al. (2021) Qureshi et al. (2018); Schaefers et al. (2021); Tóth et al. (2022); Wang et al. (2022)

5.1.2.1. Positive economic unintended effects. Previous studies have identified economic aspects, such as the generation and distribution of revenues, as a positive unintended effect of sharing (Jemio et al., 2024; Merino-Saum et al., 2023; Pillai et al., 2021). The primary motivation for local accommodation providers is to generate supplementary income through SEBMs such as Airbnb (Buhalis et al., 2020; Chang, 2020; Nieuwland and Van Melik, 2020). Park and Armstrong (2019) indicate that the ability to earn money through sharing practices is a notable positive unintended effect and a frequently cited motivation for individuals participating in the SEBM. Home hosts periodically provide underutilized space in their residences to generate revenue and financial support. These individuals are frequently empty-nesters residing in spacious homes or young professionals who acquire large houses and require assistance with mortgage payments. They exhibit opportunism in their choice of hosting times, frequently focusing on high-demand periods, including holidays, events, and exhibitions, when hotel accommodations are at capacity (Lim et al., 2021; Schoonover et al., 2022). Simon and Roederer (2019) identify this home sharer group as a pivotal component of the sharing ecosystem. Empty nesters rent spare rooms to fulfill financial obligations, akin to the operational model of traditional bed and breakfasts. They frequently lack the financial means to remain in their own home without engaging in SE contexts (Buhalis et al., 2020). So, SEBM positively generates new revenue streams. Additionally, SEBM significantly influences the traditional labor market.

It enhances gross domestic product (GDP) and contributes to economic gains, including the distribution of revenue for economic equity (Akbari et al., 2021; Gössling and Michael Hall, 2019; Qureshi et al., 2021b). SEBMs additionally promote revenue generation for local governments via taxation (Plepys and Singh, 2019). So, generating and distributing revenues promotes sustainability in an economically viable way.

Property value enhancement reflects another economic positive unintended effect. Local residents not directly engaged in the SE gain indirect benefits through the rising of property values (Buhalis et al., 2020; Coles, 2022). Gurran (2018) stated that in various global regions with significant demand for SEBM services, property values have nearly doubled in a brief timeframe. This has led to increased rental income and the gentrification of previously deteriorated areas, enhancing certain quality of life aspects for residents (Buhalis et al., 2020; Habibi and Kohli, 2022). Therefore, property value enhancement indirectly improves the economic performance of a region and supports sustainability from an economic perspective.

The growth of SEBM fosters entrepreneurial activities as a positive unintended effect. This growth can enhance the local economy and facilitate better wealth allocation (Ciulli and Kolk, 2019; Martin, 2016; Zheng et al., 2021). Kessler (2014) posited that SEBMs enable individuals in society to act as microentrepreneurs by monetizing on their unused resources, time, and abilities. This economic growth is especially advantageous for small firms and microentrepreneurs with constrained marketing resources and those managing start-ups (Dreyer et al., 2017; Faraji et al., 2024; Qureshi et al., 2021b). SEBMs can particularly empower entrepreneurial women with limited resources to access markets (Benkler, 2004; Zheng et al., 2021). SEBMs hold significant potential for empowering small businesses, companies in distant or rural regions, and businesses in emerging economies. This implies that the SE offers enhanced opportunities for contributions to entrepreneurship and innovation ecosystems (Gerwe et al., 2022; Gössling and Michael Hall, 2019). So, entrepreneurial activity in a SE context fosters economic growth and sustainability.

A notable positive unintended effect for SEBMS is cost efficiency. The objective is to increase output while minimizing resource use and reducing material and energy inputs through efficient processes, thereby enhancing cost efficiency (N. M. Bocken et al., 2014; Geissinger et al., 2019; Laukkanen and Tura, 2020). The consequence of adopting a sustainability perspective is enhanced efficiency and cost savings for SEBMs (Akbar and Tracogna, 2018; Voytenko Palgan and Sadovska, 2023). The positive unintended effect of cost efficiency enhances the demand for efficient products and services, leading to the neglect of non-efficient alternatives. This results in savings in energy and resources. In sustainable business models within SE, the creation of economic value is associated with enhanced cost efficiency (Öberg, 2024; Pillai et al., 2021; Tura and Laukkanen, 2023). Laukkanen and Tura (2020) suggest structuring businesses to improve material and energy efficiency, minimize costs, and maximize profitability. From an economic perspective, SEBMs can reduce resource waste and enhance economic efficiency by substituting ownership with access and redistribution of underutilized resources (Ciulli and Kolk, 2019; Dabbous and Tarhini, 2021; Foroozanfar et al., 2024; Ganapati and Reddick, 2018). This initiative represents progress toward cost efficiency for sustainability from an economic aspect.

Job creation reveals a positive unintended effect of SEBMs in the economy. Studies imply that SEBMs create substantial employment opportunities across various sectors, including tourism (Coles, 2022; Sainaghi et al., 2021; Sutarya, 2023) and transportation (Nozari et al., 2021; Perkumienė et al., 2021; Schaefers, 2013), which exert significant local economic effects. SEBMs contribute to job creation and economic growth, although the main incentive for SEBMs' participation in SE is financial gain (Wang et al., 2022). Employment in SEBMs can generate economic value at the societal level by enhancing overall economic well-being (Laukkanen and Tura, 2020). In addition, the SEBMS can significantly enhance value chains, demonstrating positive effects on regional development (Gössling and Michael Hall, 2019). This empowerment and development leads to an increase in local job opportunities (Corsini et al., 2021). Therefore, job creation enhances the economic performance of a region and contributes to sustainability from an economic standpoint.

Accessibility and diversity for cheaper products and services represent a positive economic unintended effect for consumers. SEBMs frequently provide access to markets on a global scale with minimal transaction costs (Akbar and Tracogna, 2018; Carlborg et al., 2023; Henten and Windekilde, 2016). SEBMs can improve access to goods or services for individuals who currently lack the financial means to purchase or obtain them. SEBMs enable consumers to make comparisons based on price or quality, as indicated by consumer reports (Mock and Wankat, 2024; Nozari et al., 2021; Plepys and Singh, 2019; Schaefers et al., 2021; Schoonover et al., 2022). Airbnb, for example, offers more affordable lodging, particularly for BOP and low-income groups (Ameri et al., 2020; Dogru et al., 2020; Nieuwland and Van Melik, 2020; Zervas et al., 2017). This positive unintended effect enhances consumer purchasing power, reduces transaction and information costs, and promotes flexibility for users and customers. Access to more affordable products and services improves the quality of life for disadvantaged groups and supports sustainability from an economic perspective.

The brand reputation of service providers serves as a significant positive unintended effect in SE contexts. SEBMs improve brand reputation and boost the attraction of customers, employees, and partners for service providers (Laukkanen and Tura, 2020). In certain sectors, including hospitality, there is a significant correlation between business rankings and sales (Akbar and Tracogna, 2018; Barari et al., 2022; Gassmann et al., 2021). This has significantly heightened the pressure on businesses to maintain high quality in SE contexts. Evaluations largely remain beyond the control of businesses, as major entities like TripAdvisor exert significant influence over the online reputation of numerous SMEs and destinations (Cheng, 2016; Gössling and Michael Hall, 2019). Service providers of SEBMs may improve their reputation and brand image by leveraging customer feedback. So, brand reputation significantly improves a business's economic performance and supports sustainability from an economic perspective.

5.1.2.2. Positive environmental unintended effects. The SEBMS exhibits a significant positive unintended effect with regard to environmental awareness. People often view the SE as a consumption model that enhances environmental factors. Aligned with this assumption, numerous studies have identified expected environmental benefits as a key motivating factor for engagement in the SE (Garus et al., 2024; Ivanova et al., 2016; Makov et al., 2020; Melander and Wallström, 2023; Merino-Saum et al., 2023; Singh et al., 2021). Studies analyzing SEBMs from an environmental standpoint emphasize the beneficial environmental impact for several reasons, such as prolonged asset utilization, purchasing access instead of ownership, resource conservation, and maximizing the idle capacity of current assets (Claudelin et al., 2022; Henry et al., 2021; Makov et al., 2020; Paundra et al., 2017). On the other hand, the decreased demand for new products and the resulting decline in production within the SEBM can lead to reduced energy consumption, thereby lowering pollution and greenhouse gas emissions (Garus et al., 2024; Hamari et al., 2016; Jung and Koo, 2018; Nozari et al., 2021). Increasing environmental awareness and comprehension of the ecological benefits of SEBMs can positively influence economic development in alignment with environmental considerations. In fact, environmental consciousness is the driving force for SEBMs. This positive effect fosters ecological awareness regarding the environmental dimensions of sustainability.

Green and lean actions demonstrate the positive environmental effect of SEBMs. Lean principles form the foundation of SEBM's green and lean actions. The aim is to enhance customer value while minimizing waste and adverse environmental effects (Danese et al., 2018; Ganji et al., 2021; Melander and Wallström, 2023). SEBMs utilize lean concepts to generate value through waste minimization, quality enhancement, energy conservation, and environmental improvement (Galdini and De Nardis, 2021; Makov et al., 2020; Silva and Morais, 2021). Furthermore, it utilizes methodologies such as 5S, Kaizen, total productive maintenance, and value stream mapping to improve resource productivity and efficiency (Sinkovics et al., 2021). Originally, the formulation of the lean mindset aimed to boost operational productivity. Later, it evolved into a comprehensive strategy that aims to optimize customer satisfaction and reduce waste and energy consumption in SEBMs (Andrew and Pigosso, 2024; Dabbous and Tarhini, 2021; Garus et al., 2024). The implementation of green and lean practices results in a net reduction in energy usage and other environmental pressures. Consequently, green and lean actions in SE contexts improve regional ecology concern and promote sustainability from an environmental perspective.

The functionality promotion serves as a notable positive unintended effect in SE contexts. SEBMs provide their functionality through a product-service system, often referred to as dematerialization (Plepys and Singh, 2019), or a function-oriented business model (N. M. Bocken et al., 2014). This positive effect creates new revenue streams for SEBMs by meeting customer expectations in a tailored and integrative way, enhancing customer loyalty, and facilitating innovation. There are three types of functionality promotion for SEBMs: product-oriented, use-oriented, and results-oriented (Sinkovics et al., 2021). Product-oriented SEBM focuses on selling products that include additional modules, such as lifetime warranties and scheduled maintenance. In use-oriented SEBM, the supplier retains ownership of the goods, granting users only access to them. In a results-oriented SEBM, the supplier commits to providing the consumer with a specific result or outcome rather than a particular product or service. The objective of providing functionality instead of ownership is to deliver utility to the user (N. M. Bocken et al., 2014; Evans et al., 2017; Geissdoerfer et al., 2018; Roberts et al., 2023). So, functionality promotion encompasses products and services within consumer offerings that provide a product, a function, or an outcome. It provides services that address user needs without necessitating product ownership. Functionality promotion of SEBMs resolves ecological concern through resource conservation and energy efficiency, thereby fostering sustainability from an environmental standpoint.

Circular orientation illustrates the positive environmental unintended effect of SEBMs. This positive environmental effect arises when sharing materials, redistributing products, or increasing product utilization reduces the consumption of new goods, consequently leading to lower carbon footprints, emissions, and waste (Claudelin et al., 2022; Palgan and Mont, 2023; Silva and Morais, 2021). The emergence of circular orientations provides a great opportunity for SEBMs to reveal their positive environmental effect (Geissdoerfer et al., 2017; Goffetti et al., 2022). There are three circular orientations of SEBMs: closing, slowing, and narrowing resource loops. The practice of recycling is known as a "closed resource loop." This approach basically produces a circular stream of goods by closing the resource loop between post-use and manufacturing (Rusch et al., 2023; Suchek et al., 2021). Through recycling, SEBM fulfills its sustainability objectives. This strategy has the potential to reduce material, waste, and energy usage (Geissdoerfer et al., 2022). Slowing down resource loops leads to the emergence of circular orientation (N. Bocken and Ritala, 2021; De Angelis, Morgan and De Luca, 2023). Using repair and remanufacturing as examples, service loops can extend the life of a product. This extends or intensifies the durability of products, thereby reducing resource flow (N. M. Bocken et al., 2016; Geissdoerfer et al., 2020; Mont et al., 2006). This strategy supports SEBMs through the design of durable products and life cycle extension procedures, such as service loops that offer repair and remanufacturing (Palgan and Mont, 2023). Furthermore, narrow resource loops enhance resource efficiency. It aims to reduce the quantity of resources required to produce a specific product (Foroozanfar et al., 2022). This strategy contributes to SEBM's enhanced resource and virgin material productivity. So, circular orientations in SEBMs promote sustainability from an environmental perspective.

5.1.2.3. Positive social unintended effects. Societal values represent a positive social unintended effect for SEBMs. Societal value, also known as social interaction, tries to achieve social objectives by enhancing relational and reciprocal connections between market participants of SEBMs (Gerwe et al., 2022; Qureshi et al., 2018). Consequently, societal values tend to prioritize tangible and intangible social interactions and relationships over economic worth (Sinkovics et al., 2021). These techniques are based on trust, and their administrative structures work to make sure the business upholds its responsibilities to its constituents, including the environment and society at large (Galdini and De Nardis, 2021; Mittendorf, 2017). Consequently, societal value integrates social goals with market value to deliver socially valuable interactions for SEBM's stakeholders. Furthermore, social interaction with visitors can foster enjoyment, provide diversion, expose individuals to new ideas, and enhance community engagement. Consumers occasionally perceive sharing as a pleasurable and enjoyable experience (Lashitew et al., 2022; Pillai et al., 2021). Positive emotions enhance individuals' intentions to engage and promote the activity. Numerous families, for instance, opt to utilize shared living areas within a house instead of multiple hotel rooms to enhance togetherness (Jemio et al., 2024). Therefore, societal value with a positive social effect enhances interaction in SE contexts and promotes sustainability from a social perspective.

Cultural learning is another positive social unintended effect for SEBMs. For instance, lodging exchanges might facilitate the formation of new social bonds, particularly when these exchanges are non-monetary and their primary purpose is social. SEBMs like Couchsurfing provide opportunities for cultural learning as travelers engage in close, emotionally intense physical interactions with hosts (Gössling and Michael Hall, 2019). For many members of the community, participating in SEBMs is a means of cultural learning (Coffay et al., 2024; Foroozanfar et al., 2024). Additionally, Cultural learning fosters trust, interactions, and collaboration through the development of social ties. Cultural learning derived from SEBMs promotes social capital and enhances cohesiveness in society (Baumber et al., 2021; Escobedo et al., 2021; Qureshi, Bhatt and Shukla, 2021a). Therefore, from a social perspective, cultural learning derived from SEBMs promotes sustainability.

Frugality provides a significant positive unintended effect in SE contexts. SEBMs can make the shift to sustainability through frugality. The primary solutions for frugality leading to sustainability include affordable and accessible goods; the establishment of a niche market; community empowerment; simple production; and adoption simplicity. The affordability and accessibility of frugal goods are two of their most crucial characteristics. Moreover, through affordability and accessibility, product innovation could reach niche markets to enhance the quality of life for underprivileged clients and provide local jobs (Dabić et al., 2022; Dąbrowska et al., 2019; Mont et al., 2019). The formation of new segments, such as new customers, new market segments, and new methods of sustainable development, is the result of frugal tactics. Innovations for emerging economies demand new business techniques for offering reasonably-priced goods; hence, local expertise is essential for satisfying local wants (Clauss et al., 2019; Lippolis et al., 2023). Additionally, one of the most important strategies for frugal development is making it easy to use so that it can spread throughout communities. Simple production techniques do not need complex procedures or advanced technologies (Hossain, 2021b). In addition to empowering locals, frugal innovation generates local jobs (Corsini et al., 2021), which may involve the use of inexpensive local labor to make inexpensive commodities. Besides creating new types of jobs and client segments, frugal innovations empower communities and serve niche markets (Dabić et al., 2022; David-West et al., 2019). The term "ease of adoption" emphasizes how simple it is for consumers to begin utilizing cost-saving goods (Hossain, 2021b). Consequently, various methods exist through which frugal approaches promote sustainability from a social perspective.

Poverty alleviation demonstrates another positive social unintended effect of SEBMs. Poverty is a complex and broad issue, with low income representing only one facet of the problem. Therefore, innovative approaches that generate value for companies, the poor, and other stakeholders in both financial and nonfinancial fields are essential for effectively addressing poverty (Grimm, 2022; Hamari et al., 2016; Qureshi et al., 2018). Dembek and York (2022) characterized poverty alleviation as the reduction of poverty in Bottom of the Pyramid (BOP) regions while offering financial advantages to business proprietors. SEBMs seek to achieve favorable societal outcomes by addressing poverty alleviation (Wang et al., 2022). SEBMs reduce information asymmetry and transaction costs (Akbar and Tracogna, 2018; Henten and Windekilde, 2016; Pillai et al., 2021). This offers those with low incomes access to more affordable sharing services as an alternative to buying costly products (Foroozanfar et al., 2024). Poverty alleviation also contributes to social intermediation and the development of social capital (Galdini and De Nardis, 2021; Pillai et al., 2021; Qureshi et al., 2021b; Schaefers et al., 2021; Tóth et al., 2022). So, poverty alleviation enhances sustainability from a social standpoint.

5.2. Integrated framework

To address RQ3, a systematic review of the literature offers an integrative framework that not only represents prior research but also serves the theory's development and the prediction of future research initiatives (Paul et al., 2021; Rauch, 2020). We develop an integrative framework on the basis of sustainability transition theory. This framework serves as the basis for future scientific studies. Additionally, it facilitates the organization of our literature review, clearly illustrating our two thematic analyses. This section elaborates the dimensions of SEBM and the sustainability pillars within SE contexts, while also reviewing both negative and positive unintended effects. Fig. 5 illustrates the integrative framework, which is further elaborated in the subsequent sections.

5.2.1. Negative and positive unintended effects of SEBM

We conducted two thematic analyses leveraging sustainability pillars, encompassing the negative and positive unintended effects highlighted in Tables 2 and 3. The first thematic analysis identified and categorized negative unintended effects. We analyzed price inflation, unequal competition, and ignoring other options within the economic dimension. We classified excessive consumption and greenhouse gas emissions within the environmental dimensions of sustainability. The social dimension encompasses congestion and annoyance, overlooking employee rights, unethical behavior, trust anxiety, health and hygiene concerns, customer misconduct, and minimal interpersonal interaction. Additionally, we identified and categorized the positive unintended effects as our second thematic analysis. We classified them into three categories, which correspond to the three pillars of sustainability: economic, environmental, and social, as our initial thematic analysis. We classified generating and distributing revenue, property value enhancement, fostering entrepreneurial activity, cost efficiency, job creation, accessibility and diversity, and brand reputation under the economic theme. Environmental awareness, green and lean actions, functionality promotion, and circular orientation were categorized under the environmental theme. Societal value, cultural learning, frugality, and poverty alleviation were categorized as social themes. The previous section titled "Thematic Analysis" provided a comprehensive explanation of both negative and positive unintended effects.

5.2.2. SEBM dimensions

The SE may also promote significant peer-to-peer interactions to develop according to the business model, which would empower participants, increase community trust, and strengthen social cohesion (Curtis, 2021; Tykkyläinen and Ritala, 2021). Moreover, according to Richardson (2008), business model components include value creation and delivery, value proposition, and value capture. These components contribute as analytical categories for the literature reviews on SE (Foroozanfar et al., 2024; Gao and Li, 2020; Laukkanen and Tura, 2020; Reuschl et al., 2021; Ritter and Schanz, 2019). Furthermore, this category of business model can be completely integrated into other business models, such as the "Business Model Canvas" proposed by Osterwalder and Pigneur (2010). The nine components of the business model canvas

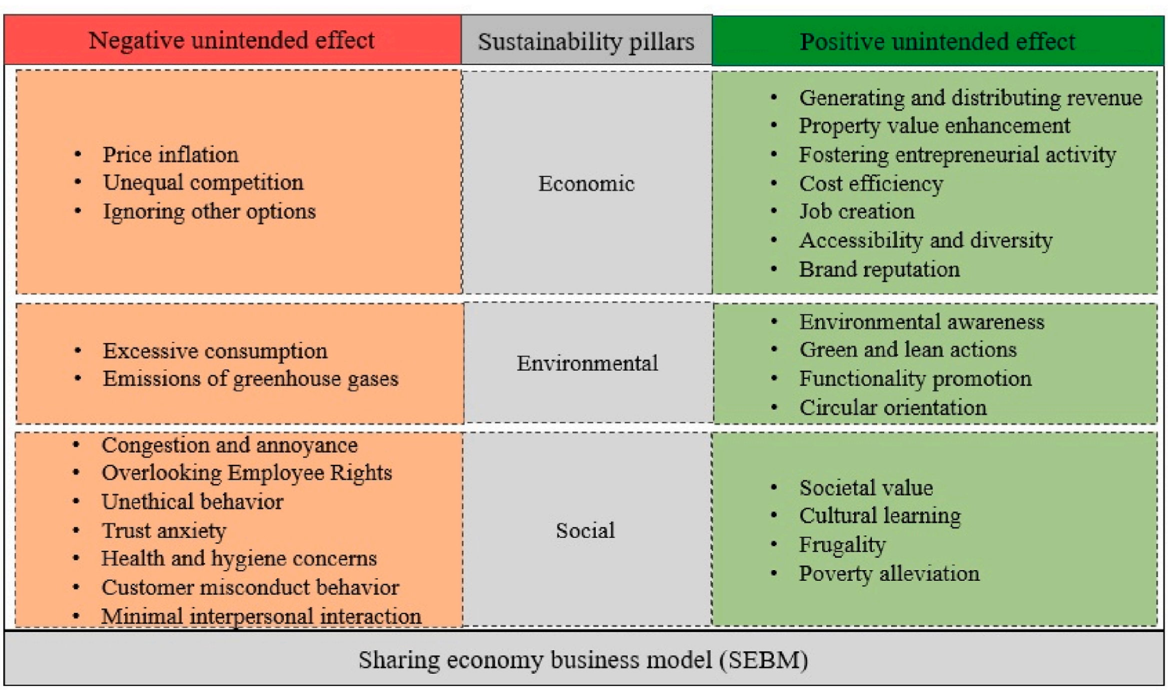

Fig. 5. Integrative framework for SEBM and its unintended effects.

are typically categorized into three primary elements: value proposition, value creation and delivery, and value capture (N. M. Bocken et al., 2014; Nuβholz, 2017; Ritter and Schanz, 2019).

The process of creating and delivering value has a new meaning in the SE because users, firms, and the government can all be on either the demand or supply side alternatively (Clauss, 2017; Enochsson et al., 2021; Grieco, 2021; Palgan et al., 2021; Winslow and Mont, 2019). The process of creating value also involves deploying resources (Rohn et al., 2021; Rosati et al., 2022; Schneider and Clauβ, 2020). This develops into a malleable idea in the SE that might be governed by the platforms without the need to really own them. In contrast to traditional businesses, many of the most important resources in the SE are provided by customers. This increases the function of SEBMs, whose primary purpose is to connect individuals with resources to those in need. SEBMs provide a fresh value proposition, or the means by which businesses successfully satisfy client requirements (Acquier et al., 2017; Clauss et al., 2019; Zvolska et al., 2019).

The SEBM's value proposition is largely founded on the access-over-ownership notion, with platforms supporting the increased efficiency of underutilized items. Regarding value capture, the SEBM allows additional revenue generating alternatives, such as asking for a transaction fee for mediating between actors, requiring a periodic submission fee, or allowing end users to participate for free while charging the business side. In addition, participating in a multisided market enables SEBMs to develop additional revenue streams via value capture. The majority of SEBMs are built on the principle of optimizing resource utilization, which often entails utilizing products and infrastructure more efficiently. There are exceptions to the rule that many SEBMs promote the sustainable use of resources by offering access rather than ownership. For instance, unused spaces can be made accessible for collaboration. In addition, decreasing costs may lead to a boost in demand, leading to a rise in environmental consequences and greenhouse gas emissions. Thus, numerous SEBMs confront sustainability issues.

5.2.3. Sustainability pillars for SEBM

Various theories have been employed in SE studies (Hossain, 2020). The theory of sustainability transition is much relevant to the SE (Claudelin et al., 2022; Geissinger et al., 2019; Govindan et al., 2020; Laukkanen and Tura, 2020; Martin, 2016; Tóth et al., 2022). The primary objective of this theory is to describe how sustainable practices function properly and who is involved (Martin, 2016). We leveraged sustainability transition theory to conduct two thematic analyses and develop an integrative framework. We elaborated on sustainability pillars for the SEBM. This SEBM variant strives to prioritize sustainability, reduce the detrimental impacts of SE, and prevent unintended effects. In order to be sustainable, SEBM must improve social engagement, reduce greenhouse gas emissions, and minimize net resource extraction. A SEBM has economic, environmental, and social effects.

Sustainable SEBM fosters entrepreneurship, employment enhancement, and economic progress, with monetary gain as the major incentive for engagement in SE. In addition, sustainable SEBM has a substantial effect on the conventional labor market. It boosts the gross domestic product (GDP), as well as other financial advantages, such as cost savings, and is essential to customer involvement (Akbari et al., 2021; Voytenko Palgan and Sadovska, 2023). Sustainable SEBM has evolved as an efficient method for recycling unused resources. It reduces wasteful spending behaviors and generates new streams of income.

Environmentally speaking, sustainable SEBM promotes sustainable consumption. It contributes to the environment by increasing access to eco-friendly goods. Although consumers have access to environmentally friendly goods and services, they are typically driven entirely by self-interest (Edbring et al., 2016; Paundra et al., 2017; Zvolska et al., 2020). In contrast, more travel as a result of more inexpensive SEBM in the lodging and transportation sectors may increase environmental concern and resource exhaustion (Akbari et al., 2021; Henry et al., 2021). Due to the inevitability of negative unintended effects, sustainable consumption requires a shift in purchasing habits. However, sustainable SEBM plays a significant role in sustainable development, and sustainability has a positive impact on people's attitudes toward SE.

Sustainable SEBM promotes the development of social relationships with local communities (Curtis et al., 2020; Tiberius et al., 2021). However, eco-conscious consumers may also place an emphasis on sustainability; therefore, sustainable SEBM is seen to have a beneficial social impact. Additionally, it provides access to non-reciprocal services such as gift-giving. Consequently, it can generate a sense of belonging among participants. It provides access to costly, long-lasting products. For instance, ridesharing forces taxi companies to adopt new technologies and lower their prices (Eckhardt and Bardhi, 2016). However, when regarded as a whole, sustainable SEBM organically results in reduced resource use and a reduced global footprint. So, SEBM has negative and positive unintended effects on sustainability, which we elaborated on in the thematic analysis section.

6. Discussion: implication, limitation and avenues for future research

6.1. Implication

6.1.1. Theoretical implication

This study unveils three contributions to the literature on SEBM and sustainability, based on sustainability transition theory. First, from a sustainability perspective, the study classifies the positive and negative unintended effects of SEBMs. Key themes and subthemes are identified through the use of thematic analysis. This study points out a major gap in current research, showing that there is not enough information on the unintended effects of SEBMs (Akbari et al., 2021; Foroozanfar et al., 2024; Henry et al., 2021; Jemio et al., 2024). This study enhances sustainability transition theory through a systematic analysis of the effects, highlighting the dual role of SEBMs in sustainability transitions. SEBMs can facilitate sustainability by enhancing resource efficiency, minimizing waste, and encouraging collaborative consumption as positive unintended effects. Conversely, they may function as disruptors, resulting in heightened consumption, environmental degradation, and social inequalities as negative unintended effects. This duality questions the common belief that SEBMs are inherently sustainable and highlights the necessity for a more refined comprehension of their function in sustainability transitions. The findings support the theory's focus on the co-evolution of economic, social, and environmental systems, demonstrating that SEBMs can both facilitate and hinder the transition to sustainable production-consumption patterns (Lippolis et al., 2023; Rogge and Reichardt, 2016).

Second, the study establishes an integrative framework for SEBMs that applies sustainability pillars and business model dimensions. This framework enhances sustainability transition theory by offering a systematic method for analyzing the intricate relationship between SEBMs and sustainability (Aagaard et al., 2021; Neesham et al., 2023). This theoretical advancement establishes a basis for future research aimed at investigating the development of SEBMs to enhance their positive effects on sustainability transitions and reduce negative unintended effects.

Third, the study emphasizes the multifaceted impacts of SEBMs on sustainability and their emergent nature. This study enhances the discourse on sustainability transitions by highlighting the necessity of addressing unintended effects and developing SEBMs that are consistent with long-term sustainability objectives (Curtis and Mont, 2020; Mont et al., 2016; Plepys and Singh, 2019). This contribution aligns with sustainability transition theory by highlighting the significance of diverse actors such as businesses, consumers, and policymakers in influencing sustainability transitions (Hernández-Chea et al., 2021). This study highlights significant deficiencies in existing literature and suggests avenues for future research in section 6.3.

6.1.2. Managerial implication

This study's systematic literature review had significant implications for managers and practitioners. The SEBMs encourage communities to consume more sustainably (Claudelin et al., 2022; Heinrichs, 2013; Martin, 2016; Schoonover et al., 2021). It is claimed that by boosting access to goods rather than ownership, for instance, net consumption will decrease. Conversely, the SEBM may have negative impacts on sustainability due to negative unintended effects; net consumption may rise; and present sharing habits may have undesirable economic, social and environmental unintended effects. So, SEBM does not guarantee sustainability (Curtis and Mont, 2020; Plepys and Singh, 2019). This study identifies both negative and positive unintended effects of SEBM and groups them according to a sustainability perspective. From the perspective of sustainability, it may be possible to avoid negative unintended effects. If managers are actually involved in SEBM, they must promote the environmental and social benefits and sustainable effects of SEBM (Habibi et al., 2017).

The SEBM is not naturally sustainable (Curtis and Mont, 2020), so managers must select the most suitable solutions and employ SEBMs with caution to facilitate a successful transition to sustainability. We believe there are some notable positive unintended effects for SEBM that foster the sustainability transition. According to our second thematic analysis, we categorized 15 positive unintended effects and classified them into three groups based on sustainability pillars. Managers may need to reconsider their evaluation of economic, environmental, and social initiatives. In order to generate and foster positive unintended effects of their SEBMs, businesses should also proactively develop their business models to guarantee the sustainability of their SEBMs.

6.2. Limitation

It is noted that this study has certain limitations that must be discussed. The first limitation is integral to the notion of SEBM, whereas the second is methodological in nature. First, the SEBM notion is still debated (Barari et al., 2022; Ciulli and Kolk, 2019; Dabić et al., 2024; Gerwe et al., 2022; Öberg, 2023). Additional study is anticipated to fill up the gaps in all facets of this field of study, especially in relation to the emerging unknown unintended effect of SEBM (Buhalis et al., 2020; Garus et al., 2024; Griffiths et al., 2019; Jemio et al., 2024; Nieuwland and Van Melik, 2020). The second limitation of this study is mostly attributable to the methodology used to undertake a systematic literature review. Our research team may have overlooked crucial studies in the initial sampling. Nevertheless, snowballing cross-references considerably minimize this issue (Foroozanfar et al., 2022). Another limitation relates to cross-reference snowballing, which may lack random representativeness, duplicating the selection bias identified in the investigated literature. A meta-analysis, despite its potential for valuable statistical insights, was deemed unsuitable for this review due to the heterogeneity of methodologies and the qualitative nature of many included publications.

6.3. Avenues for future research

This study has identified possible future research routes to address RQ3. We developed an integrative framework to facilitate recognizing gaps for further aspects of SEBM and its unintended effects. This study leveraged sustainability transition theory to classify the unintended effects and develop an integrative framework. We recommend conducting further research to develop a framework that incorporates other theories like institutional, transaction cost, hedonic demand, stakeholder, agency, and social capital theory (Hossain, 2020).

This study employed a systematic literature review methodology. In the descriptive analysis section, we analyze papers' methodological design. The findings indicate that certain methodologies, such as conceptual, qualitative, and quantitative studies, are prevalent in the field. The current research could not determine the full extent of SEBM's significance and its unintended effect. We encourage the implementation of more quantitative research on the SEBM to prioritize its negative and positive unintended effects. Furthermore, the unintended effects of SEBMs are multiple and highly contextual, demonstrating a significant research opportunity to elucidate the extent to which positive and negative unintended effects sum up. As noted in the limitations section concerning meta-analysis, the availability of additional quantitative research on SEBMs may enable future studies to employ meta-analysis to provide robust statistical evidence regarding the sustainability effects of SEBMs.

We analyzed the sector context of the included publications in our descriptive analysis. The findings of the analysis indicate that a significant proportion of the papers underwent scrutiny in multiple countries and sectors. It is advisable for researchers who are interested to undertake an in-depth study of a specific sector. It will provide precise outcomes and valuable perspectives for fellow researchers, managers, and policymakers. Additionally, examining different sectors and industries can offer valuable perspectives when comparing outcomes across diverse sectors.

7. Conclusion

This study conducted a systematic literature review, adhering to the PRISMA protocol to address the research questions. We conducted a descriptive analysis to address RQ1. The analysis encompassed publication outlets, country and sector contexts, as well as the methodological designs of the included publications. In addressing RQ2, we explored and categorized the negative and positive unintended effects of SEBM according to the sustainability pillars: economic, environmental, and social, which constitute our themes. The initial thematic analysis revealed 12 distinct negative unintended effects. Price inflation, unequal competition, and ignoring other options were categorized within the economic theme. We classified excessive consumption and greenhouse gas emissions under the environmental category. The social theme includes congestion and annoyance, overlooking employee rights, unethical behavior, trust anxiety, health and hygiene concerns, customer misconduct, and minimal interpersonal interaction. The second thematic analysis identified 15 distinct positive unintended effects. We classified generating and distributing revenue, property value enhancement, fostering entrepreneurial activity, cost efficiency, job creation, accessibility and diversity, and brand reputation under the economic theme. We grouped environmental awareness, green and lean actions, functionality promotion, and circular orientation within the environmental theme. Social themes consist of societal value, cultural learning, frugality, and poverty alleviation. Finally, to address RQ3. We developed an integrative framework to facilitate identifying gaps for SEBM and its unintended effects.

CRediT authorship contribution statement

Mohammad Hossein Foroozanfar: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Narges Imanipour:** Writing – review & editing, Supervision, Project administration, Methodology, Conceptualization. **Seyed Mojtaba Sajadi:** Writing – review & editing, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Mohammad Reza Habibi:** Writing – review & editing, Supervision, Methodology, Investigation, Conceptualization.

Declaration of competing interest

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

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jclepro.2025.145177.

Data availability

Included publications for this systematic literature review are available online as Appendix A.

References

Aagaard, A., Lüdeke-Freund, F., Wells, P., 2021. Introduction to business models for sustainability transitions. In: Business Models for Sustainability Transitions: How Organisations Contribute to Societal Transformation. Springer, pp. 1–25.

Acquier, A., Daudigeos, T., Pinkse, J., 2017. Promises and paradoxes of the sharing economy: an organizing framework. Technol. Forecast. Soc. Change 125, 1–10.

Acquier, A., Carbone, V., Massé, D., 2019. How to create value (s) in the sharing economy: business models, scalability, and sustainability. Technology Innovation Management Review 9 (2).

Afghah, M., Sajadi, S.M., Razavi, S.M., Taghizadeh-Yazdi, M., 2023. Hard dimensions evaluation in sustainable supply chain management for environmentally adaptive and mitigated adverse eco-effect environmental policies. Bus. Strategy Environ. 32 (7), 5044–5067.

Akbar, Y.H., Tracogna, A., 2018. The sharing economy and the future of the hotel industry: transaction cost theory and platform economics. Int. J. Hospit. Manag. 71, 91–101.

Akbari, M., Foroudi, P., Khodayari, M., Fashami, R.Z., Shahriari, E., 2021. Sharing your assets: a holistic review of sharing economy. J. Bus. Res. 140 (2022), 604–625.

Ameri, M., Rogers, S.E., Schur, L., Kruse, D., 2020. No room at the inn? Disability access in the new sharing economy. Acad. Manag. Discov. 6 (2), 176–205.

Andrew, E., Pigosso, D.C., 2024. Multidisciplinary perspectives on rebound effects in sustainability: a systematic review. J. Clean. Prod., 143366

Barari, M., Paul, J., Ross, M., Thaichon, S., Surachartkumtonkun, J., 2022. Relationships among actors within the sharing economy: meta-analytics review. Int. J. Hospit. Manag. 103, 103215.

Baumber, A., Scerri, M., Schweinsberg, S., 2019. A social licence for the sharing economy. Technol. Forecast. Soc. Change 146, 12–23.

Baumber, A., Schweinsberg, S., Scerri, M., Kaya, E., Sajib, S., 2021. Sharing begins at home: a social licence framework for home sharing practices. Ann. Tourism Res. 91, 103293.

Belk, R., 2014. You are what you can access: sharing and collaborative consumption online. Journal of business research 67 (8), 1595–1600.

Bellos, I., Ferguson, M., Toktay, L.B., 2017. The car sharing economy: interaction of business model choice and product line design. Manuf. Serv. Oper. Manag. 19 (2), 185–201.

Benkler, Y., 2004. Sharing nicely: on shareable goods and the emergence of sharing as a modality of economic production. Yale Lj 114, 273.

Benoit, S., Baker, T.L., Bolton, R.N., Gruber, T., Kandampully, J., 2017. A triadic framework for collaborative consumption (CC): motives, activities and resources & capabilities of actors. Journal of business research 79, 219–227.

Bocken, N., Ritala, P., 2021. Six ways to build circular business models. J. Bus. Res. 140, 604–625.

Bocken, N., Short, S., Rana, P., Evans, S., 2013. A value mapping tool for sustainable business modelling. Corp. Gov. 13 (5), 482–497.

Bocken, N.M., Short, S.W., Rana, P., Evans, S., 2014. A literature and practice review to develop sustainable business model archetypes. J. Clean. Prod. 65, 42–56.

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

Buhalis, D., Andreu, L., Gnoth, J., 2020. The dark side of the sharing economy: balancing value co-creation and value co-destruction. Psychol. Market. 37 (5), 689–704.

Carlborg, P., Snyder, H., Witell, L., 2023. How sustainable is the sharing business model? Toward a conceptual framework. R&D Manag. 54 (5), 1131–1144.

Castro, C.G., Trevisan, A.H., Pigosso, D.C., Mascarenhas, J., 2022. The rebound effect of circular economy: definitions, mechanisms and a research agenda. J. Clean. Prod. 345, 131136.

Chang, H.-H., 2020. Does the room sharing business model disrupt housing markets? Empirical evidence of Airbnb in Taiwan. J. Hous. Econ. 49, 101706.

Chatterjee, S., Chaudhuri, R., Vrontis, D., Foroudi, P., 2022. Dark side of sharing economy: examining the unethical practices and its impact on coopetition and firm performance. J. Bus-to-Bus. Market. 29 (1), 69–85.

Chatterjee, S., Chaudhuri, R., Vrontis, D., Mahto, R., 2023. Bright and dark sides of adopting a platform-based sharing economy business model. R&D Manag. 54 (5), 1145–1165.

Cheng, M., 2016. Sharing economy: a review and agenda for future research. Int. J. Hospit. Manag. 57, 60–70.

Ciulli, F., Kolk, A., 2019. Incumbents and business model innovation for the sharing economy: implications for sustainability. J. Clean. Prod. 214, 995–1010.

Claudelin, A., Tuominen, K., Vanhamäki, S., 2022. Sustainability perspectives of the sharing economy: process of creating a library of things in Finland. Sustainability 14 (11), 6627.

Clauss, T., 2017. Measuring business model innovation: conceptualization, scale development, and proof of performance. R&d Management 47 (3), 385–403.

Clauss, T., Kesting, T., Naskrent, J., 2019. A rolling stone gathers no moss: the effect of customers' perceived business model innovativeness on customer value co-creation behavior and customer satisfaction in the service sector. R&D Management 49 (2), 180–203.

Cocquyt, A., Crucke, S., Slabbinck, H., 2020. Organizational characteristics explaining participation in sustainable business models in the sharing economy: evidence from the fashion industry using conjoint analysis. Bus. Strat. Environ. 29 (6), 2603–2613.

Coffay, M., Tveterås, R., Bocken, N., Bogers, M., 2024. Sustainable business model innovation, dynamic capabilities, and organizational design: insights from Norwegian aquaculture. Bus. Strategy Environ. 33 (6), 5386–5404.

Coles, T., 2022. The sharing economy in tourism and property markets: a comment on the darker side of conceptual stretching. Curr. Issues Tourism 25 (19), 3068–3075.

Corsini, L., Dammicco, V., Moultrie, J., 2021. Frugal innovation in a crisis: the digital fabrication maker response to COVID-19. R&D Management 51 (2), 195–210.

Cui, M., Aziz, S., 2019. Whether sharing economy creates social value? J. Sci. Technol. Policy Manag. 10 (3), 642–666J.

Curtis, S.K., 2021. Business model patterns in the sharing economy. Sustain. Prod. Consum. 27, 1650–1671.

Curtis, S.K., Mont, O., 2020. Sharing economy business models for sustainability. J. Clean. Prod. 266, 121519.

Curtis, S.K., Singh, J., Mont, O., Kessler, A., 2020. Systematic framework to assess social impacts of sharing platforms: synthesising literature and stakeholder perspectives to arrive at a framework and practice-oriented tool. PLoS One 15 (10), e0240373.

Dabbous, A., Tarhini, A., 2021. Does sharing economy promote sustainable economic development and energy efficiency? Evidence from OECD countries. Journal of Innovation & Knowledge 6 (1), 58–68.

Dabić, M., Obradović, T., Vlačić, B., Sahasranamam, S., Paul, J., 2022. Frugal innovations: a multidisciplinary review & agenda for future research. Journal of business research 142, 914–929.

Dabić, M., Kraus, S., Clauss, T., Brem, A., Ritala, P., 2024. Business models for the sharing economy: charting the multidisciplinary research field. R&D Management (n/a), n/a. https://doi.org/10.1111/radm.12720.

Dąbrowska, J., Lopez-Vega, H., Ritala, P., 2019. Waking the sleeping beauty: swarovski's open innovation journey. R&D Management 49 (5), 775–788.

Danese, P., Manfè, V., Romano, P., 2018. A systematic literature review on recent lean research: state-of-the-art and future directions. Int. J. Manag. Rev. 20 (2), 579–605.

Danglot, B., Vera-Perez, O., Yu, Z., Zaidman, A., Monperrus, M., Baudry, B., 2019. A snowballing literature study on test amplification. J. Syst. Software 157, 110398.

David-West, O., Iheanachor, N., Umukoro, I.O., 2019. Mobile money as a frugal innovation for the bottom of the pyramid–Cases of selected African countries. Africa Journal of Management 5 (3), 274–302.

Davidson, A., Habibi, M.R., Laroche, M., 2018. Materialism and the sharing economy: a cross-cultural study of American and Indian consumers. Journal of business research 82, 364–372.

De Angelis, R., Morgan, R., De Luca, L.M., 2023. Open strategy and dynamic capabilities: a framework for circular economy business models research. Bus. Strategy Environ. 32 (7), 4861–4873.

Dembek, K., York, J., 2022. Applying a sustainable business model lens to mutual value creation with base of the pyramid suppliers. Bus. Soc. 61 (8), 2156–2191.

Dogru, T., Mody, M., Suess, C., Line, N., Bonn, M., 2020. Airbnb 2.0: is it a sharing economy platform or a lodging corporation? Tour. Manag. 78, 104049.

Dreyer, B., Lüdeke-Freund, F., Hamann, R., Faccer, K., 2017. Upsides and downsides of the sharing economy: collaborative consumption business models' stakeholder value impacts and their relationship to context. Technol. Forecast. Soc. Change 125, 87–104.

Eckhardt, G.M., Bardhi, F., 2016. The relationship between access practices and economic systems. Journal of the Association for Consumer Research 1 (2), 210–225.

Edbring, E.G., Lehner, M., Mont, O., 2016. Exploring consumer attitudes to alternative models of consumption: motivations and barriers. J. Clean. Prod. 123, 5–15.

Enochsson, L., Voytenko Palgan, Y., Plepys, A., Mont, O., 2021. Impacts of the sharing economy on urban sustainability: the perceptions of municipal governments and sharing organisations. Sustainability 13 (8), 4213.

Escobedo, M.B., Zheng, Z., Bhatt, B., 2021. Socially oriented sharing economy platform in regional Australia: a Polanyian analysis. Sharing Economy at the Base of the Pyramid: Opportunities and Challenges, pp. 53–73.

Etter, M., Fieseler, C., Whelan, G., 2019. Sharing economy, sharing responsibility? Corporate social responsibility in the digital age. J. Bus. Ethics 159 (4), 935–942.

Evans, S., Vladimirova, D., Holgado, M., Van Fossen, K., Yang, M., Silva, E.A., Barlow, C. Y., 2017. Business model innovation for sustainability: towards a unified perspective for creation of sustainable business models. Bus. Strat. Environ. 26 (5), 597–608.

Faraji, M., Seifdar, M.H., Amiri, B., 2024. Sharing economy for sustainability: a review. J. Clean. Prod. 434, 140065.

Ferjanić Hodak, D., Krajinović, V., 2020. Examining recent research in the field of sharing economy in tourism: bibliometric and content analysis. Tourism Int. Interdiscipl. J. 68 (4), 402–414.

Figge, F., Thorpe, A.S., 2023. Circular economy, operational eco-efficiency, and sufficiency. An integrated view. Ecol. Econ. 204, 107692.

Foroozanfar, M.H., Imanipour, N., Sajadi, S.M., 2022. Integrating circular economy strategies and business models: a systematic literature review. Journal of Entrepreneurship in Emerging Economies 14 (5), 678–700. https://doi.org/10.1108/JEEE-10-2021-0411.

Foroozanfar, M.H., Imanipour, N., Sajadi, S.M., Habibi, M.R., 2024. Sharing business models in tourism: a cultural sustainability view. International journal of Tourism, Culture & Spirituality 7 (1), 165–185. https://doi.org/10.22133/ijtcs.2024.469364.1176.

Frenken, K., Schor, J., 2019. Putting the sharing economy into perspective. In: A Research Agenda for Sustainable Consumption Governance. Edward Elgar Publishing.

Galdini, R., De Nardis, S., 2021. Not only for-profit, sharing solidarity and promoting opportunities. A case study in rome. In: Qureshi, I., Bhatt, B., Shukla, D.M. (Eds.), Sharing Economy at the Base of the Pyramid: Opportunities and Challenges. Springer Nature Singapore, Singapore, pp. 27–52.

Ganapati, S., Reddick, C.G., 2018. Prospects and challenges of sharing economy for the public sector. Gov. Inf. Q. 35 (1), 77–87.

Ganji, M., Rabet, R., Sajadi, S.M., 2021. A new coordinating model for green supply chain and batch delivery scheduling with satisfaction customers. Environ. Dev. Sustain. 1–36.

Gao, P., Li, J., 2020. Understanding sustainable business model: a framework and a case study of the bike-sharing industry. J. Clean. Prod. 267, 122229.

Garaus, M., Garaus, C., 2021. The impact of the covid-19 pandemic on consumers' intention to use shared-mobility services in German cities. Front. Psychol. 12, 646593.

Garus, A., Alonso Oreña, B., Alonso Raposo, M., Mourtzouchou, A., Cordera Piñera, R., Lima Azevedo, C., Ciuffo, B., 2024. Estimation of environmental rebound effect induced by shared automated passenger transport service in a mid-size European city via microsimulation. Transp. Res. Rec. 2678 (8), 966–978. https://doi.org/10.1177/03611981231223752.

Gassmann, S.-E., Nunkoo, R., Tiberius, V., Kraus, S., 2021. My home is your castle: forecasting the future of accommodation sharing. Int. J. Contemp. Hosp. Manag. 33 (2), 467–489.

Geissdoerfer, M., Savaget, P., Bocken, N.M., Hultink, E.J., 2017. The Circular Economy–A new sustainability paradigm? J. Clean. Prod. 143, 757–768.

Geissdoerfer, M., Vladimirova, D., Evans, S., 2018. Sustainable business model innovation: a review. J. Clean. Prod. 198, 401–416.

Geissdoerfer, M., Pieroni, M.P., Pigosso, D.C., Soufani, K., 2020. Circular business models: a review. J. Clean. Prod. 277, 123741.

Geissdoerfer, M., Santa-Maria, T., Kirchherr, J., Pelzeter, C., 2022. Drivers and barriers for circular business model innovation. Bus. Strategy Environ. 32 (6), 3814–3832.

Geissinger, A., Laurell, C., Öberg, C., Sandström, C., 2019. How sustainable is the sharing economy? On the sustainability connotations of sharing economy platforms. J. Clean. Prod. 206, 419–429.

Gerwe, O., Silva, R., Castro, J.d., 2022. Entry of providers onto a sharing economy platform: macro-level factors and social interaction. Entrepreneurship Theory and practice 46 (4), 833–856.

Gioia, D.A., Corley, K.G., Hamilton, A.L., 2013. Seeking qualitative rigor in inductive research: notes on the Gioia methodology. Organ. Res. Methods 16 (1), 15–31.

Goffetti, G., Böckin, D., Baumann, H., Tillman, A.M., Zobel, T., 2022. Towards sustainable business models with a novel life cycle assessment method. Bus. Strat. Environ. 31 (5), 2019–2035.

Gössling, S., Michael Hall, C., 2019. Sharing versus collaborative economy: how to align ICT developments and the SDGs in tourism? J. Sustain. Tourism 27 (1), 74–96.

Govindan, K., Shankar, K.M., Kannan, D., 2020. Achieving sustainable development goals through identifying and analyzing barriers to industrial sharing economy: a framework development. Int. J. Prod. Econ. 227, 107575.

Grieco, C., 2021. Innovating the innovated: business model innovation process in sharing economy companies. Creativ. Innovat. Manag. 30 (4), 860–871.

Griffiths, M.A., Perera, B.Y., Albinsson, P.A., 2019. Contrived surplus and negative externalities in the sharing economy. J. Market. Theor. Pract. 27 (4), 445–463.

Grimm, J., 2022. Cognitive frames of poverty and tension handling in base-of-the-pyramid business models. Bus. Soc. 61 (8), 2070–2114.

Gurran, N., 2018. Global home-sharing, local communities and the Airbnb debate: a planning research agenda. Plann. Theor. Pract. 19 (2), 298–304.

Gurran, N., Phibbs, P., 2017. When tourists move in: how should urban planners respond to Airbnb? J. Am. Plann. Assoc. 83 (1), 80–92.

Guzzo, D., Walrave, B., Videira, N., Oliveira, I.C., Pigosso, D.C., 2024. Towards a systemic view on rebound effects: modelling the feedback loops of rebound mechanisms. Ecol. Econ. 217, 108050.

Habibi, M.R., 2019. In: The Progression and Impact of the Sharing Economy; a Preface, vol. 27. Taylor & Francis, pp. 349–354.

Habibi, M.R., Kohli, C.S., 2022. The sharing economy: a hedge against recession setbacks. J. Bus. Strat. 43 (4), 239–246.

Habibi, M.R., Davidson, A., Laroche, M., 2017. What managers should know about the sharing economy. Bus. Horiz. 60 (1), 113–121.

Hahn, R., Ostertag, F., Lehr, A., Büttgen, M., Benoit, S., 2020. "I like it, but I don't use it": impact of carsharing business models on usage intentions in the sharing economy. Bus. Strat. Environ. 29 (3), 1404–1418.

Hamari, J., Sjöklint, M., Ukkonen, A., 2016. The sharing economy: why people participate in collaborative consumption. Journal of the association for information science and technology 67 (9), 2047–2059.

Hang, C., Liu, Z., Wang, Y., Hu, C., Su, Y., Dong, Z., 2019. Sharing diseconomy: impact of the subsidy war of ride-sharing companies on urban congestion. Int. J. Logist. Res. Appl. 22 (5), 491–500.

Heinrichs, H., 2013. Sharing economy: a potential new pathway to sustainability. GAIA-Ecological Perspectives for Science and Society 22 (4), 228–231.

Henry, M., Schraven, D., Bocken, N., Frenken, K., Hekkert, M., Kirchherr, J., 2021. The battle of the buzzwords: a comparative review of the circular economy and the sharing economy concepts. Environ. Innov. Soc. Transit. 38, 1–21.

Henten, A.H., Windekilde, I.M., 2016. Transaction Costs and the Sharing Economy. *info*.

Hernández-Chea, R., Jain, A., Bocken, N.M., Gurtoo, A., 2021. The business model in sustainability transitions: a conceptualization. Sustainability 13 (11), 5763.

Hertwich, E.G., 2005. Consumption and the rebound effect: an industrial ecology perspective. J. Ind. Ecol. 9 (1-2), 85–98.

Hiebl, M.R.W., 2023. Sample selection in systematic literature reviews of management research. Organ. Res. Methods 26 (2), 229–261. https://doi.org/10.1177/1094428120986851.

Hofmann, F., 2019. Circular business models: business approach as driver or obstructer of sustainability transitions? J. Clean. Prod. 224, 361–374.

Hossain, M., 2020. Sharing economy: a comprehensive literature review. Int. J. Hospit. Manag. 87, 102470.

Hossain, M., 2021a. The effect of the Covid-19 on sharing economy activities. J. Clean. Prod. 280, 124782.

Hossain, M., 2021b. Frugal innovation and sustainable business models. Technol. Soc. 64, 101508.

Hwang, J., 2019. Managing the innovation legitimacy of the sharing economy. Int. J. Qual. Innovat. 5 (1), 1–21.

Ivanova, D., Stadler, K., Steen-Olsen, K., Wood, R., Vita, G., Tukker, A., Hertwich, E.G., 2016. Environmental impact assessment of household consumption. J. Ind. Ecol. 20 (3), 526–536.

Jemio, P.R., Merino-Saum, A., Hansmann, R., Binder, C.R., 2024. Is the sharing economy a sustainable mode of consumption? An empirical case study of sharing of household goods and environmental rebound effects in a university context. Cleaner and Responsible Consumption 14, 100210.

Jevons, W.S., 1866. The Coal Question; an Inquiry Concerning the Progress of the Nation and the Probable Exhaustion of Our Coal-Mines. Macmillan.

Jung, J., Koo, Y., 2018. Analyzing the effects of car sharing services on the reduction of greenhouse gas (GHG) emissions. Sustainability 10 (2), 539.

Kannisto, P., 2017. Sharing for profit: a new business model? Ann. Tourism Res. 66, 206–208.

Kessler, S., 2014. Hire Me. Fast Company, pp. 33–36.

Kim, S., Filimonau, V., Dickinson, J.E., 2020. The technology-evoked time use rebound effect and its impact on pro-environmental consumer behaviour in tourism. J. Sustain. Tourism 28 (2), 164–184.

Klarin, A., Suseno, Y., 2021. A state-of-the-art review of the sharing economy: scientometric mapping of the scholarship. Journal of business research 126, 250–262.

Klarin, A., Suseno, Y., 2023. An integrative literature review of social entrepreneurship research: mapping the literature and future research directions. Bus. Soc. 62 (3), 565–611. https://doi.org/10.1177/00076503221101611.

Köbis N, C., Soraperra, I., Shalvi, S., 2021. The consequences of participating in the sharing economy: a transparency-based sharing framework. J. Manag. 47 (1), 317–343.

Kolotylo-Kulkarni, M., Xia, W., Dhillon, G., 2021. Information disclosure in e-commerce: a systematic review and agenda for future research. Journal of business research 126, 221–238.

Kraus, S., Li, H., Kang, Q., Westhead, P., Tiberius, V., 2020. The sharing economy: a bibliometric analysis of the state-of-the-art. Int. J. Entrep. Behav. Res. 26 (8), 1769–1786.

Kumar, V., Lahiri, A., Dogan, O.B., 2018. A strategic framework for a profitable business model in the sharing economy. Ind. Mark. Manag. 69, 147–160.

Lashitew, A.A., van Tulder, R., Muche, L., 2022. Social value creation in institutional voids: a business model perspective. Bus. Soc. 61 (8), 1992–2037.

Laukkanen, M., Tura, N., 2020. The potential of sharing economy business models for sustainable value creation. J. Clean. Prod. 253, 120004.

Lehner, M., Mont, O., Heiskanen, E., 2016. Nudging–A promising tool for sustainable consumption behaviour? J. Clean. Prod. 134, 166–177.

Li, D., Liu, G., Jia, F., Sun, H., 2019. Sharing economy–based service triads: towards an integrated framework and a research agenda. J. Clean. Prod. 218, 1031–1044.

Lim, W.M., 2020. The sharing economy: a marketing perspective. Australasian Marketing Journal (AMJ) 28 (3), 4–13.

Lim, W.M., Yap, S.-F., Makkar, M., 2021. Home sharing in marketing and tourism at a tipping point: what do we know, how do we know, and where should we be heading? Journal of business research 122, 534–566.

Lippolis, S., Ruggieri, A., Leopizzi, R., 2023. Open innovation for sustainable transition: the case of Enel "open power". Bus. Strat. Environ. 32 (7), 4202–4216.

Luo, X., Tong, S., Lin, Z., Zhang, C., 2021. The impact of platform protection insurance on buyers and sellers in the sharing economy: a natural experiment. J. Market. 85 (2), 50–69.

Ma, Y., Lan, J., Thornton, T., Mangalagiu, D., Zhu, D., 2018. Challenges of collaborative governance in the sharing economy: the case of free-floating bike sharing in Shanghai. J. Clean. Prod. 197, 356–365.

Makov, T., Shepon, A., Krones, J., Gupta, C., Chertow, M., 2020. Social and environmental analysis of food waste abatement via the peer-to-peer sharing economy. Nat. Commun. 11 (1), 1156.

Martin, C.J., 2016. The sharing economy: a pathway to sustainability or a nightmarish form of neoliberal capitalism? Ecol. Econ. 121, 149–159.

Melander, L., Wallström, H., 2023. The benefits of green horizontal networks: lessons learned from sharing charging infrastructure for electric freight vehicles. Bus. Strat. Environ. 32 (4), 1835–1846.

Merino-Saum, A., Jemio, P.R., Hansmann, R., Binder, C., 2023. Drivers and barriers to participation in the sharing economy: does the environment really matter? A systematic review of 175 scientific articles. Resour. Conserv. Recycl. 198, 107121.

Mignon, I., Bankel, A., 2022. Sustainable business models and innovation strategies to realize them: a review of 87 empirical cases. Bus. Strategy Environ. 32 (4), 1357–1372.
Mittendorf, C., 2017. Create an Uber account? An investigation of trust and perceived risk in the sharing economy. J. Cust. Behav. 16 (3), 281–307.
Mock, M., Wankat, K., 2024. Why do sustainable shared mobility practices not proliferate more widely? Insights from digital mobility diaries. J. Clean. Prod., 143582
Moher, D., Liberati, A., Tetzlaff, J., Altman, D.G., Group, P., 2009. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. Annals of internal medicine 151 (4), 264–269.
Mont, O., 2004. Institutionalisation of sustainable consumption patterns based on shared use. Ecol. Econ. 50 (1–2), 135–153.
Mont, O., Dalhammar, C., Jacobsson, N., 2006. A new business model for baby prams based on leasing and product remanufacturing. J. Clean. Prod. 14 (17), 1509–1518.
Mont, O., Lehner, M., Schoonover, H., 2016. Business Models for Sustainable Consumption.
Mont, O., Whalen, K., Nussholz, J., 2019. Sustainable innovation in business models: celebrated but not interrogated. In: Handbook of Sustainable Innovation. Edward Elgar Publishing, pp. 124–140.
Mont, O., Palgan, Y.V., Bradley, K., Zvolska, L., 2020. A decade of the sharing economy: concepts, users, business and governance perspectives. J. Clean. Prod. 269, 122215.
Mont, O., Curtis, S.K., Palgan, Y.V., 2021. Organisational response strategies to COVID-19 in the sharing economy. Sustain. Prod. Consum. 28, 52–70.
Mont, O., Lehner, M., Dalhammar, C., 2022. Sustainable consumption through policy intervention—a review of research themes. Frontiers in Sustainability 3, 921477.
Mont, O., Lehner, M., Richter, J.L., Plepys, A., 2023. Sustainable lifestyle choices in food and their rebound effects. Paper Presented at the 5th SCORAI, 21st ERSCP, and Wageningen University Conference: Transforming Consumption-Production Systems toward Just and Sustainable Futures.
Mosaad, M., Benoit, S., Jayawardhena, C., 2023. The dark side of the sharing economy: a systematic literature review of externalities and their regulation. Journal of business research 168, 114186.
Nash, N., Whitmarsh, L., Capstick, S., Hargreaves, T., Poortinga, W., Thomas, G., Xenias, D., 2017. Climate-relevant behavioral spillover and the potential contribution of social practice theory. Wiley Interdisciplinary Reviews: Clim. Change 8 (6), e481.
Neesham, C., Dembek, K., Benkert, J., 2023. Defining value in sustainable business models. Bus. Soc. 62 (7), 1378–1419. https://doi.org/10.1177/00076503221147902.
Nieuwland, S., Van Melik, R., 2020. Regulating Airbnb: how cities deal with perceived negative externalities of short-term rentals. Curr. Issues Tourism 23 (7), 811–825.
Nozari, M.A., Ghadikolaei, A.S., Govindan, K., Akbari, V., 2021. Analysis of the sharing economy effect on sustainability in the transportation sector using fuzzy cognitive mapping. J. Clean. Prod. 311, 127331.
Nungsari, M., Chuah, H.Y., 2021. Participation in the Sharing Economy for Refugees in Malaysia: A Solution that Bypasses Legal Constraints? *Sharing Economy At the Base Of the Pyramid: Opportunities And Challenges*, pp. 127–147.
Nußholz, J.L., 2017. Circular business models: defining a concept and framing an emerging research field. Sustainability 9 (10), 1810.
Öberg, C., 2023. Towards a typology of sharing economy business model transformation. Technovation 123, 102722.
Öberg, C., 2024. Sharing economy models and sustainability: towards a typology. J. Clean. Prod. 447, 141636.
Octavia, D., Nasution, R.A., Yudoko, G., 2022. A conceptual framework for food sharing as collaborative consumption. Foods 11 (10), 1422.
Osterwalder, A., Pigneur, Y., 2010. Business Model Generation: a Handbook for Visionaries, Game Changers, and Challengers, vol. 1. John Wiley & Sons.
Palgan, Y.V., Mont, O., 2023. Share and repair in cities: agenda for research and practice on circular urban resilience. In: A Research Agenda for Sustainable Cities and Communities. Edward Elgar Publishing, pp. 81–102.
Palgan, Y.V., Mont, O., Sulkakoski, S., 2021. Governing the sharing economy: towards a comprehensive analytical framework of municipal governance. Cities 108, 102994.
Parguel, B., Lunardo, R., Benoit-Moreau, F., 2017. Sustainability of the sharing economy in question: when second-hand peer-to-peer platforms stimulate indulgent consumption. Technol. Forecast. Soc. Change 125, 48–57.
Park, H., Armstrong, C.M.J., 2019. Will "no-ownership" work for apparel?: implications for apparel retailers. J. Retailing Consum. Serv. 47, 66–73.
Paul, J., Merchant, A., Dwivedi, Y.K., Rose, G., 2021. Writing an impactful review article: what do we know and what do we need to know? Journal of business research 133, 337–340.
Paundra, J., Rook, L., van Dalen, J., Ketter, W., 2017. Preferences for car sharing services: effects of instrumental attributes and psychological ownership. Journal of environmental psychology 53, 121–130.
Perkumienė, D., Vienažindienė, M., Švagždienė, B., 2021. The sharing economy towards sustainable tourism: an example of an online transport-sharing platform. Sustainability 13 (19), 10955.
Pies, I., Hielscher, S., Everding, S., 2020. Do hybrids impede sustainability? How semantic reorientations and governance reforms can produce and preserve sustainability in sharing business models. Journal of business research 115, 174–185.
Pillai, V., Pandey, M., Bhatt, B., 2021. Social sustainability at the BOP through building inclusive social capital: a case study of Drishtee. Sharing Economy at the Base of the Pyramid: Opportunities and Challenges, pp. 301–318.
Plante, S.. Uber and Lyft have admitted to making traffic worse in some US cities. Vox. https://www.vox.com/the-goods/2019/8/6/20757593/uber-lyft-traffic-congestionpricing.
Plepys, A., Singh, J., 2019. Evaluating the sustainability impacts of the sharing economy using input-output analysis. In: A Research Agenda for Sustainable Consumption Governance. Edward Elgar Publishing.
Qureshi, I., Fang, Y., Haggerty, N., Compeau, D.R., Zhang, X., 2018a. IT-mediated social interactions and knowledge sharing: role of competence-based trust and background heterogeneity. Inf. Syst. J. 28 (5), 929–955.
Qureshi, I., Sutter, C., Bhatt, B., 2018b. The transformative power of knowledge sharing in settings of poverty and social inequality. Organ. Stud. 39 (11), 1575–1599.
Qureshi, I., Bhatt, B., Shukla, D.M., 2021a. Overview of sharing economy at the base of the pyramid. In: Qureshi, I., Bhatt, B., Shukla, D.M. (Eds.), Sharing Economy at the Base of the Pyramid: Opportunities and Challenges. Springer Nature Singapore, Singapore, pp. 1–23.
Qureshi, I., Bhatt, B., Shukla, D.M., 2021b. Sharing economy at the base of the pyramid-research framework and future directions. In: Qureshi, I., Bhatt, B., Shukla, D.M. (Eds.), Sharing Economy at the Base of the Pyramid: Opportunities and Challenges. Springer Nature Singapore, Singapore, pp. 337–349.
Rauch, A., 2020. Opportunities and Threats in Reviewing Entrepreneurship Theory and Practice. SAGE Publications Sage CA, Los Angeles, CA.
Reuschl, A., Tiberius, V., Filser, M., Qiu, Y., 2021. Value configurations in sharing economy business models. Review of Managerial Science 1–24.
Reuter, E., 2022. Hybrid business models in the sharing economy: the role of business model design for managing the environmental paradox. Bus. Strat. Environ. 31 (2), 603–618.
Richardson, J., 2008. The business model: an integrative framework for strategy execution. Strateg. Change 17 (5–6), 133–144. https://doi.org/10.1002/jsc.821.
Richter, J.L., Mont, O., Lehner, M., 2023. Potential rebound effects of 1.5° lifestyles. Paper Presented at the 5th Conference on Product Lifetimes and the Environment (PLATE).
Ritter, M., Schanz, H., 2019. The sharing economy: a comprehensive business model framework. J. Clean. Prod. 213, 320–331.
Roberts, H., Milios, L., Mont, O., Dalhammar, C., 2023. Product destruction: exploring unsustainable production-consumption systems and appropriate policy responses. Sustain. Prod. Consum. 35, 300–312.
Rogge, K.S., Reichardt, K., 2016. Policy mixes for sustainability transitions: an extended concept and framework for analysis. Res. Pol. 45 (8), 1620–1635.
Rohn, D., Bican, P.M., Brem, A., Kraus, S., Clauss, T., 2021. Digital platform-based business models–An exploration of critical success factors. J. Eng. Technol. Manag. 60, 101625.
Rong, K., Xiao, F., Wang, Y., 2019. Redundancy in the sharing economy. Resour. Conserv. Recycl. 151, 104455.
Rosati, F., Rodrigues, V.P., Cosenz, F., Li-Ying, J., 2022. Business model innovation for the sustainable development goals. Bus. Strategy Environ. 32 (6), 3752–3765.
Rusch, M., Schöggl, J.P., Baumgartner, R.J., 2023. Application of digital technologies for sustainable product management in a circular economy: a review. Bus. Strat. Environ. 32 (3), 1159–1174.
Sainaghi, R., Köseoglu, M.A., Mehraliyev, F., 2021. The intellectual structure of the sharing economy. Tour. Econ. 27 (5), 1137–1156.
Santarius, T., Walnum, H.J., Aall, C., 2016. Introduction: rebound research in a warming world. Rethinking Climate and Energy Policies: New Perspectives on the Rebound Phenomenon, pp. 1–14.
Schaefers, T., 2013. Exploring carsharing usage motives: a hierarchical means-end chain analysis. Transport. Res. Pol. Pract. 47, 69–77.
Schaefers, T., Wittkowski, K., Benoit, S., Ferraro, R., 2016. Contagious effects of customer misbehavior in access-based services. J. Serv. Res. 19 (1), 3–21.
Schaefers, T., Narayanamurthy, G., Moser, R., Leban, M., 2021. The sharing economy at the base of the economic pyramid: how access-based services can help overcome ownership risks. Psychol. Market. 38 (11), 2073–2088.
Schneider, S., Clauß, T., 2020. Business models for sustainability: choices and consequences. Organ. Environ. 33 (3), 384–407.
Schoonover, H.A., Mont, O., Lehner, M., 2021. Exploring barriers to implementing product-service systems for home furnishings. J. Clean. Prod. 295, 126286.
Schoonover, H.A., Mont, O., Klintman, M., 2022. Communicating access-based business models: company framings of home furnishings rental. Cleaner and Responsible Consumption 4, 100047.
Schor, J., 2016. Debating the sharing economy. J. Self Govern. Manag. Econ. 4 (3), 7–22.
Silva, W.D.O., Morais, D.C., 2021. Transitioning to a circular economy in developing countries: a collaborative approach for sharing responsibilities in solid waste management of a Brazilian craft brewery. J. Clean. Prod. 319, 128703.
Simon, F., Roederer, C., 2019. When social intrusiveness depletes customer value: a balanced perspective on the agency of simultaneous sharers in a commercial sharing experience. Psychol. Market. 36 (11), 1082–1097.
Singh, J., Plepys, A., Mont, O., 2018. Sustainability assessment of the sharing economy: an overview of various modelling approaches. Paper Presented at the Gordon Research Conference on Industrial Ecology.
Singh, J., Lehner, M., Winslow, J., Voytenko Palgan, Y., Mont, O., 2021. Exploring Social, Economic and Environmental Consequences of Collaborative Production: the Case of Bike Repair Maker Spaces in Three European Countries.
Sinkovics, N., Gunaratne, D., Sinkovics, R.R., Molina-Castillo, F.-J., 2021. Sustainable business model innovation: an umbrella review. Sustainability 13 (13), 7266.
Šiuškaitė, D., Pilinkienė, V., Žvirdauskas, D., 2019. The conceptualization of the sharing economy as a business model. Eng. Econ. 30 (3), 373–381.
Snyder, H., 2019. Literature review as a research methodology: an overview and guidelines. Journal of business research 104, 333–339.

Suchek, N., Fernandes, C.I., Kraus, S., Filser, M., Sjögrén, H., 2021. Innovation and the circular economy: a systematic literature review. Bus. Strat. Environ. 30 (8), 3686–3702.
Sutarya, I.G., 2023. Economic sharing based "tri hita karana" as A corporate social responsibility (CSR) of spiritual tourism in bali. International journal of Tourism, Culture & Spirituality 6 (1), 131–147.
Tedja, B., Al Musadieq, M., Kusumawati, A., Yulianto, E., 2024. Systematic literature review using PRISMA: exploring the influence of service quality and perceived value on satisfaction and intention to continue relationship. Future Business Journal 10 (1), 39.
Tiberius, V., Stiller, L., Dabić, M., 2021. Sustainability beyond economic prosperity: social microfoundations of dynamic capabilities in family businesses. Technol. Forecast. Soc. Change 173, 121093.
Tóth, Z., Nemkova, E., Hizsák, G., Naudé, P., 2022. Social capital creation on professional sharing economy platforms: the problems of rating dependency and the non-transferability of social capital. Journal of business research 144, 450–460.
Tura, N., Laukkanen, M., 2023. Toward a sustainable sharing economy with business model innovations in the clothing industry. R&D Management 54 (5), 1190–1212.
Tykkyläinen, S., Ritala, P., 2021. Business model innovation in social enterprises: an activity system perspective. Journal of business research 125, 684–697.
Voytenko Palgan, Y., Sadovska, V., 2023. Research protocol for mobile research labs on food sharing: tracing costs, investments, challenges. Drivers, and Success Factors to Establish and Maintain Food Sharing Initiatives.
Wang, D., Yan, L., Ruan, F., Zeng, X., 2022. An abductive analysis of debates on the impact of the sharing economy: a systematic review in a sustainable framework. Sustainability 14 (7), 3996.
Winslow, J., Mont, O., 2019. Bicycle sharing: sustainable value creation and institutionalisation strategies in Barcelona. Sustainability 11 (3), 728.
Xu, Y., Hazée, S., So, K.K.F., Li, K.D., Malthouse, E.C., 2021. An evolutionary perspective on the dynamics of service platform ecosystems for the sharing economy. Journal of business research 135, 127–136.
Zervas, G., Proserpio, D., Byers, J.W., 2017. The rise of the sharing economy: estimating the impact of Airbnb on the hotel industry. J. Mark. Res. 54 (5), 687–705.
Zheng, W., Yang, J., Wu, Y.J., Lin, C., 2021. Social innovation and entrepreneurship in a sharing economy. Manag. Decis. 59 (11), 2660–2673.
Zimmermann, K., Palgan, Y.V., 2024. Upscaling cargo bike sharing in cities: a comparative case study. J. Clean. Prod., 143774
Zvolska, L., Palgan, Y.V., Mont, O., 2019. How do sharing organisations create and disrupt institutions? Towards a framework for institutional work in the sharing economy. J. Clean. Prod. 219, 667–676.
Zvolska, L., Lehner, M., Palgan, Y.V., Mont, O., Plepys, A., 2020. Urban sharing in smart cities: the cases of Berlin and London. Smart and Sustainable Cities? 72–89. Routledge.