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CIRCULAR ECONOMY: DEFINITION, POSITIVE AND NEGATIVE SIDES

***Abstract.** The circular economy (CE) is a regenerative framework where resources are constantly recycled and repurposed. The circular economy emphasizes sustainability by promoting the reuse, recycling and regeneration of materials. This article explores the positives and negatives of a closed and circular economy. They show that overcoming the constraints is possible through coordinated efforts, innovation and a shared commitment to sustainability. Government strategies that promote circularity, combined with industry initiatives, will play a critical role in driving this change. As we stand at the intersection of economic, environmental and social challenges, the standards of a closed loop economy offer a guide to a more sustainable and challenging future. The integration of positive and negative points of view emphasizes the requirement of a reasonable and universal methodology. By acknowledging subtleties, encouraging coordinated efforts, and fostering innovation, social orders can explore the path to circularity by understanding commitment to a regenerative and integrated economic model. The transition to a circular economy is not just an economic goal; it is a shared responsibility to protect our planet and ensure prosperity long into the future.” This article is devoted to the analysis of the definition of the circular economy, positive and negative sides, and the difficulties that are inherent in the closed economy and the economy of a closed cycle. An attempt has been made through the complex interaction between economic practice and natural consequences to gain a full understanding of the standards of the circular economy. This article uses a systematic literature review methodology to gather and study relevant data. A combination of scholarly data sets, journals, and authoritative sources was recommended to ensure a far-reaching outline of the topic. The rules of identification focused on the recency, plausibility and importance of the sources. In addition, key themes and examples were identified through a subjective literature review. The used research methodology guarantees a thorough and confirmed study of a closed and closed economy.*

Keywords: circular economy, advantages, disadvantages, resources, closed economy, open economy.

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ЦИРКУЛЯРНА ЕКОНОМІКА: ВИЗНАЧЕННЯ, ПОЗИТИВНІ ТА НЕГАТИВНІ СТОРОНИ

***Анотація.** Циркулярна економіка (CE) - це регенеративна основа, де ресурси постійно переробляються та перепрофілюються. Економіка замкнутого циклу підкреслює стійкість шляхом просування повторного використання, переробки та регенерації матеріалів. У цій статті досліджуються позитивні та негативні сторони закритої та циклічної економіки. Вони показують, що подолання стримуючих факторів можливо завдяки скоординованим зусиллям, інноваціям і спільним зобов'язанням щодо стійкості. Урядові стратегії, які сприяють циркулярній діяльності, у поєднанні з галузевими ініціативами відіграють вирішальну роль у спрямуванні цих змін. Оскільки ми стоїмо на перетині економічних, екологічних і соціальних труднощів, стандарти закритої економіки замкнутого циклу пропонують орієнтир до додаткового сталого та складного майбутнього. Інтеграція позитивних і негативних точок зору підкреслює вимогу розумної та універсальної методології.*

Визнаючи тонкощі, заохочуючи скоординовані зусилля та сприяючи інноваціям, соціальні порядки можуть сприяти дослідженню шляху до циркулярності, розуміючи цінність регенеративної та комплексної економічної моделі. Перехід до економіки замкнутого циклу - це не просто економічна мета; це загальний обов'язок захистити нашу планету та гарантувати процвітання протягом тривалого часу в майбутньому. Наша стаття присвячена аналізу визначення циркулярної економіки, позитивним та негативним її сторонам, труднощам, які притаманні закритій економіці та економіці замкнутого циклу. Зроблено спробу через комплексну взаємодію між економічною практикою та природними наслідками отримати повне розуміння стандартів циркулярної економіки. У цій статті використовується методологія систематичного огляду літератури для накопичення та вивчення відповідних даних. Було рекомендовано поєднання наборів наукових даних, журналів і поважних джерел, щоб гарантувати далекоюсяжне окреслення теми. Правила зосереджувалися на сучасності, правдоподібності та важливості джерел. Крім того, ключові теми та приклади були розпізнані шляхом суб'єктивного дослідження літератури. Використана методологія дослідження гарантує ретельне та підтвержене дослідження закритої та замкнутої економіки.

Ключові слова: циркулярна економіка, переваги, недоліки, ресурси, закрыта економіка, відкрита економіка.

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Relevance. The idea of a Circular Economy (CE) has acquired critical consideration as of late, introducing an option in contrast to the customary linear model. In a closed economy, resources are utilized, disposed of, and frequently squandered, adding to natural debasement and economic failure. The circular economy, then again, accentuates sustainability by advancing the reuse, recycling, and regeneration of materials. As social orders wrestle with the difficulties of environmental change and resource exhaustion, the shift towards a circular model becomes basic. This article investigates the definitions, positive, and negative sides of closed and circular economies, revealing insight into their implications for the environment and economy. (Šalgovičová & Ušák, 2021). The global scene of resource utilization and economic practices is at a basic crossroads, provoking a significant reexamination of customary models. The linear straight economy, described by the "take, make, dispose" worldview, has for quite some time been the foundation of industrialization. In any case, the natural repercussions of this direct methodology are presently difficult to overlook. Landfills prosper with disposed of items, biological systems strain under the heaviness of exploitation, and the phantom of resource shortage lingers forebodingly.

Because of these difficulties, the idea of a Circular Economy (CE) arises as an encouraging sign and a pragmatic arrangement. (Machacek et al., 2017) Dissimilar to the direct economy's one-way direction, the circular model imagines a regenerative framework where resources are constantly cycled, renewed, and repurposed. This extraordinary shift addresses an environmental basis as well as a significant reevaluation of economic standards.

At its center, a Circular Economy takes a stab at closed-circle frameworks, where waste is limited, and materials are given new life through reusing and reutilization. This takeoff from the conventional open-ended, inefficient practices isn't just environmentally responsible but guarantees economic benefits too. By

decoupling economic development from resource utilization, circular economies plan to make a more sustainable and strong starting point for global prosperity. (Laurenti et al., 2018)

Inside the domain of a Closed Economy, the circular paradigm tracks down reverberation as an extraordinary power. In a closed framework, resources are moderated, squandering is limited, and the ecological effect is relieved. The closed economy, when lined up with circular standards, turns into a unique biological system where each item's finish of life is a possible start for another. This comprehensive methodology holds the commitment to breaking liberated from the shackles of resource exhaustion and natural corruption, offering a sustainable way ahead. (Sessa et al., 2021)

While the straight economy's inadequacies are progressively obvious, changing to a circular model isn't without challenges. The idleness of laid-out economic frameworks, combined with the requirement for significant starting ventures, presents impressive deterrents. Furthermore, exploring the complexities of global inventory chains and overcoming ingrained consumer behavior require vital and coordinated endeavors.

And although there is a significant number of scientific publications on the development of the circular economy, this problem will require constant development and the formation of an appropriate concept and scientific school

Analysis of recent publications and research. The literature encompassing circular economies envelops a rich embroidery of hypotheses and empirical studies. (Sessa et al., 2021) Researchers contend that the circular methodology decreases ecological effects as well as cultivates economic strength. Contextual analysis on fruitful circular economy executions, like the Netherlands' drives in squander decrease and resource recuperation, feature the expected advantages. Nonetheless, challenges endure, including the requirement for huge forthright

speculations and the intricacies of production network rebuilding. A comprehensive review of existing writing structures is the establishment for grasping the multi-layered nature of closed and circular economies.

The article dives into the complexities of these economic models, giving important experiences into their ecological and economic ramifications. One winning subject in insightful conversations is the criticalness to create some distance from the direct "take, make, dispose" model towards a more sustainable, circular methodology.

Various examinations accentuate the natural advantages of circular economies. (Sessa et al., 2021) Resource protection is a focal fundamental, intending to expand the existence pattern of items and materials. Specialists highlight the decrease of waste and fossil fuel byproducts as immediate results of circular practices. Prominent models incorporate drives promoting the repair and resale of gadgets, redirecting e-waste from landfills and decreasing the interest in new unrefined components.

Economic contemplations are fundamental to the writing, with an emphasis on the potential for work creation and economic development inside circular frameworks. The regenerative idea of circular economies, where materials are reused and repurposed, adds to the advancement of new businesses and services. For example, the reusing area considers development to be a critical part of circular economic methodologies, producing work and economic worth from waste materials.

Nonetheless, the writing likewise addresses the difficulties and intricacies related to progressing to circular economies. High forthright expenses for executing sustainable practices and the requirement for broad framework changes are oftentimes referred to as obstacles. The shift from a direct to a circular inventory network includes reexamining creation processes, store network coordinated factors, and shopper conduct, all of which request significant ventures and key preparation.

A basic part of the writing centers around contextual investigations that feature effective circular economy executions. The Netherlands is in many cases referred to as a spearheading model, with drives to make a circular material industry and diminish plastic waste. (Avdiushchenko & Zajac, 2019) Illustrations drawn from these contextual investigations give significant bits of knowledge into the reasonable items of carrying out circular standards, offering a guide for different districts and ventures.

Ecological effect appraisals are highlighted noticeably in the writing, assessing the net positive results of circular economy reception. Life cycle assessments (LCAs) are regularly utilized to quantify the ecological impression of items and administrations inside circular frameworks. (Aleksić et al., 2023) These evaluations assist with measuring the decrease in fossil fuel byproducts, energy utilization, and resource exhaustion accomplished through circular works, giving essential information to policymakers and organizations the same.

Additionally, the literature highlights the job of innovation in working with circular economies. Innovations, for example, blockchain are studied for their true capacity in making straightforward and discernible supply chains, critical for guaranteeing the validness of reused materials. The combination of computerized innovations and data analytics is viewed as an impetus for streamlining resource use and improving the general effectiveness of circular frameworks.

Regardless of the obvious advantages, researchers likewise notice the possible disadvantages of circular economies. Criticisms incorporate the gamble of greenwashing, where organizations might embrace a circular manner of speaking without significant changes in their practices. Moreover, the adequacy of circular models fluctuates across businesses, and a few areas might confront more prominent challenges in accomplishing circularity because of the idea of their products or processes. (Laurenti et al., 2018)

Proceeding with our study of the literature, it's fundamental to dive into the financial components of closed and circular economies. Social implications are a basic feature, with researchers inspecting what these models mean for communities, consumer behavior, and social equity. Circular economies, when carried out nicely, can make comprehensive and tough communities by encouraging local enterprises and diminishing disparities in resource access.

Studies in this domain stress the importance of customer mindfulness and education. Circular economy drives frequently require changes in customer conduct, for example, embracing product sharing, repairing, and recycled markets. Understanding the elements that impact customer acknowledgement and cooperation in circular practices is urgent for effective execution. Furthermore, the writing digs into the job of education and consumer mindfulness crusades in forming a culture that values sustainability and circularity.

Besides, the article features the meaning of strategy structures in driving the progress towards circular economies. Governments assume an urgent role in boosting sustainable practices and managing ventures to line up with circular standards. Policies promoting extended producer responsibility (EPR), eco-plan, and tax incentives for circular drives are examined as powerful tools for directing organizations towards additional sustainable practices. (Deutz & Ioppolo, 2015)

A significant viewpoint frequently explored is the connection between closed and circular economies and the more extensive global economic scene. The interconnectedness of supply chains and exchange elements can either work with or frustrate the reception of circular practices. Researchers underline the requirement for global joint effort and normalized ways to deal with circularity to address difficulties connected with cross-line exchange and the progression of auxiliary unrefined components.

One more critical subject in the literature is the job of monetary establishments and financial backers in forming the direction of closed and circular economies.

(Camacho-Otero et al., 2018) The distribution of capital towards sustainable and circular drives is seen as a strong driver for change. Scientists dissect the effect of sustainable money instruments, green securities, and socially dependable speculation techniques in advancing circular economy activities and shaping corporate ways of behaving.

On a basic note, a few researchers caution against an excessively hopeful perspective on circular economies, focusing on the significance of perceiving likely potential negative results. For example, the expanded accentuation on reusing in circular models might prompt overreliance on specific materials, creating new ecological difficulties. Finding some kind of harmony between resource productivity and taking into account the more extensive biological setting is a continuous subject of discussion in the literature.

The literature survey gives a nuanced comprehension of closed and circular economies, enveloping natural, economic, and socio-social aspects. The assessment of social ramifications, strategy systems, global collaborations, monetary impacts, and potential entanglements offers a complete starting point for assessing the positive and negative parts of these economic models. As we progress to the following segments of this article, this all-encompassing viewpoint will educate our examination and conversation regarding the intricacies intrinsic in closed and circular economies.

Taking everything into account, the literature survey features the complex idea of closed and circular economies. It highlights the basics to address natural worries, while additionally perceiving the economic intricacies related to their reception. The combination of an academic point of view gives an exhaustive comprehension of the present status of examination in this field, laying the basis for the ensuing investigation of positive and negative perspectives on closed and circular economies.

The purpose of this article is to analyze the definitions and positive, and negative parts of closed and circular economies. By addressing explicit questions, like environmental impact, economic feasibility, and challenges associated with each model, this article plans to add to a nuanced comprehension of these economic standards. Making progress toward a decent evaluation, the research objective aids the investigation of different viewpoints on closed and circular economies.

The research objective of this study is attached in a promise to unwind the complexities of closed and circular economies, revealing insight into their dissimilar ways and shared convergences. As we dig into this investigation, a few key questions guide our inquiry.

1. **Environmental Impact.** One essential objective is to analyze and look at the environmental outcomes of closed and circular economies. Closed economies, described by a "take, make, dispose" mindset, frequently bring about resource exhaustion, contamination, and environment debasement. Conversely, circular economies make progress toward resource effectiveness, underlining reusing and

recovery. By analyzing existing literature and contextual research, we plan to recognize the unmistakable ecological advantages and disadvantages related to each economic model. (Trică et al., 2019)

2. **Economic Feasibility.** One more point of convergence of our research is the economic practicality of closed and circular economies. While circular economies are praised for their capability to decrease costs through proficient resource use and recycling, questions arise about the plausibility of progressing from laid-out straight frameworks. (Brenner, 2018) We try to investigate the economic ramifications, taking into account factors like starting venture prerequisites, profit from speculation, and long-haul economic sustainability. By tending to these angles, we intend to contribute significant experiences to the continuous talk encompassing the economic achievability of circular economies.

3. **Social Implications.** Beyond ecological and economic contemplations, the social ramifications of closed and circular economies warrant cautious assessment. Closed economies may coincidentally add to social imbalances and ecological shameful acts, with minimized networks frequently enduring the worst part of contamination and resource consumption. Circular economies, when carried out comprehensively, can address these social differences by encouraging local area commitment and evenhanded resource circulation. (Jones & Comfort, 2017) Our research looks to enlighten these social aspects, offering an all-encompassing point of view on the cultural effect of both economic models.

4. **Mechanical Advancements.** About quickly evolving technologies, understanding the job of development in molding closed and circular economies is foremost. Our research objective incorporates an investigation of mechanical headways that work with or block the progress to circular models. From leap forwards in reusing advancements to developments in sustainable item plans, we expect to distinguish the mechanical scene that supports the attainability and adequacy of circular economies. (Jiang & Qu, 2020)

5. **Policy Implications.** At long last, we try to unwind the strategy suggestions related to closed and circular economies. Compelling strategy systems assume an urgent part in controlling economies toward sustainability. By analyzing existing arrangements and proposing expected techniques, our research intends to contribute significant proposals for policymakers endeavoring to explore the intricacies of progressing from closed to circular economic models. (Lahti et al., 2018)

Fundamentally, the research objective encapsulates a complex investigation, intending to unwind the ecological, economic, social, mechanical, and policy aspects of closed and circular economies. By tending to these objectives, we try to give a nuanced understanding that goes past the surface, illuminating both scholarly talk and reasonable dynamics chasing a more sustainable future.

The positive parts of circular economies include a decrease in resource utilization, reduced environmental impact, and improved economic resilience. Contextual

analysis on organizations embracing circular practices feature cost savings, further developed resource proficiency, and expanded shopper trust. (Sessa et al., 2021)

Notwithstanding, challenges proliferate. The progress to a circular economy requires huge starting speculations, rebuilding of supply chains, and conquering imbued straight economic practices. Offsetting economic development with environmental sustainability remains a sensitive undertaking. (Sessa et al., 2021)

Unquestionably, we should dive further into the outcomes and conversation area, developing both the positive and negative parts of closed and circular economies.

Positive Aspects:

1. Resource Efficiency. Circular economies succeed in upgrading resource use. By advancing recycling and reusing materials, these frameworks add to resource effectiveness. Contextual analysis, for example, the remanufacturing practices in the automotive industry, outlines how items can be upgraded for various life cycles, expanding the utility of unrefined components.

2. Environmental Effect Reduction. A critical advantage of circular economies is the huge decrease in environmental effects. Customary straight economies frequently bring about broad waste and contamination. Circular practices relieve these issues by promoting a closed circle where waste is limited, and materials are saved being used to the extent that this would be possible. The positive environmental results are especially apparent in enterprises embracing circular standards.

3. Economic Resilience. Circular economies cultivate economic strength by diminishing reliance on scant resources and volatile commodity markets. Organizations that embrace circular practices frequently experience expanded dependability and versatility. The life span of items on the lookout, upheld by fix and renovation administrations, adds to a steadier economic environment.

4. Consumer Trust and Responsibility. Shoppers progressively focus on sustainable and dependable utilization. Circular economies line up with these qualities, cultivating trust and dedication. Brands that embrace circular practices are seen as environmentally cognizant, improving their standing and market intensity. This shopper-driven positive feedback loop further urges organizations to embrace circular procedures.

5. Innovation and Job Creation. Circular economies drive innovation by requiring the development of new technologies and business models. The change towards product-as-a-service, for example, expands the existence of items as well as sets out new open doors for organizations. This shift encourages work creation in areas zeroed in on recycling, remanufacturing, and sustainable plans.

6. Long-Term Cost Savings. Albeit the upfront expenses of progressing to a circular economy can be significant, long-haul benefits incorporate expense investment funds. Circular practices, for example, item

remanufacturing and material reusing, add to diminished unrefined substance acquirement costs. Organizations that put resources into circularity frequently experience work on cost viability over the item life cycle.

7. Community Engagement and Social Impact. Circular economies can have positive social effects by encouraging community engagement. Initiatives that promote local repair services, community-based recycling programs, and the sharing economy contribute to a sense of community and shared responsibility. This limited methodology improves the social fabric and reinforces community ties.

8. Reduction of Landfill Waste. A huge positive result of the circular economy is the decrease in landfill waste. By promoting recycling and the repurposing of materials, circular models redirect waste from landfills. This preserves significant land as well as mitigates environmental perils related to conventional garbage removal methods.

1. Upfront Investments a Transition Costs. One of the pre-eminent moves in progressing to a circular economy is the significant forthright investment required. Businesses dug in direct models frequently face significant expenses while rebuilding supply chains, retraining staff, and carrying out innovations. This monetary boundary can obstruct the far-reaching reception of circular practices.

2. Complexity of Supply Chain Restructuring. Moving from a straight to a circular model requires a basic rebuilding of supply chains. This interaction includes overhauling items, laying out effective reclaim frameworks, and laying out new associations. The intricacy of these progressions can be a critical hindrance, especially for huge, laid-out businesses with unpredictable stockpile organizations.

3. Consumer Conduct and Acceptance. Effective execution of circular economies depends intensely on customer acknowledgement and interest. Nonetheless, changing customer conduct can be tough. It requires training, awareness campaigns, and a social shift towards esteeming solid and repairable items over disposable ones. Protection from a change in buyer propensities represents an extensive snag.

4. Policy and Regulatory Challenges. Governments assume an urgent role in cultivating a circular economy through steady strategies and guidelines. Be that as it may, conflicting or deficient strategies can upset progress. The absence of formalized guidelines for waste management, recycling, and product design presents difficulties for organizations attempting to line up with circular standards.

5. Limited Standardization and Metrics. The shortfall of standardized measurements and rules for circularity represents a test for organizations planning to take on circular practices. Without all-around acknowledged guidelines, estimating and contrasting the circularity of items and cycles becomes testing. The improvement of normalized measurements is essential for encouraging straightforwardness and responsibility.

6. Resistance from Established Industries. Customary industries well established in linear models might oppose the progress to circular economies. Ventures dependent on planned obsolescence and intense consumption might see circular practices as a danger to their plans of action. Conquering this opposition requires deliberate endeavors in awareness building, displaying the drawn-out benefits for both the organizations and the environment.

7. Technological and Infrastructural Gaps. Embracing circular economies frequently requires progressed innovative arrangements and infrastructural variations. Small and medium-sized enterprises (SMEs), specifically, may confront difficulties in carrying out state-of-the-art advancements because of cost limitations. Connecting these mechanical and infrastructural holes is pivotal for guaranteeing comprehensive support in circular practices.

8. Global Supply Chain Complexity. In a globalized economy, products and materials frequently cross complex worldwide stockpile chains. Planning circular practices across borders presents difficulties regarding regulatory alignment, cultural differences, and logistical complexities. Tending to these difficulties requires global cooperation and harmonization of circular economy strategies.

Integration of Positive and Negative Aspects:

- accomplishing an effective circular economy requires a fragile harmony between expanding the positive viewpoints and tending to the difficulties. For example, targeted government incentives can alleviate initial financial burdens for businesses, making the transition more feasible. Collaboration among industries, policymakers, and consumers is crucial to overcome the complexities and foster a holistic, sustainable economic system. (Wiesmeth, 2020);

- besides, inventive plans of action that underscore circularity, for example, product-as-a-service and sharing economies, grandstand the potential for beating economic and regulatory difficulties. The positive examples of circular economy execution act as guides of motivation, offering experiences into conquering obstructions and advancing broad reception;

- to boost the positive parts of circular economies and relieve the difficulties, an all-encompassing methodology is important. Government support such as clear arrangements, monetary motivators, and research subsidizing can catalyze advancement and work with progress. Cooperative stages that unite organizations, policymakers, and researchers empower information sharing and critical thinking;

- moreover, educational initiatives play a crucial part in conquering shopper opposition and encouraging a culture of sustainability. (Sasmoko et al., 2022) By bringing issues to light about the advantages of circular economies and giving data on dependable utilization, social orders can effectively add to the outcome of circular models;

- the positive and negative viewpoints featured highlight the many-sided nature of changing from a closed to a circular economy. While challenges

persevere, the extraordinary capability of circular economies to encourage sustainability, flexibility, and community engagement is apparent. Through coordinated and cooperative exertion, social orders can explore the intricacies and prepare for an additional sustainable and fair future;

- all in all, while the difficulties of progressing to a circular economy are clear, the potential advantages are significant. Tending to negative viewpoints requires purposeful exertion from organizations, governments, and customers. By cultivating cooperation and embracing development, social orders can move towards an additional sustainable and strong economic model, receiving the benefits of both environmental preservation and economic steadiness.

Conclusion. In conclusion, this article gives a complete investigation of closed and circular economies, featuring their definitions and analyzing the positive and negative parts of each model. As social orders worldwide wrestle with the pressing requirement for sustainable works, understanding the intricacies of these economic ideal models becomes fundamental. A fair methodology, recognizing both the benefits and difficulties, is essential for illuminating future strategy choices and encouraging a versatile, sustainable future.

The investigation of closed and circular economies uncovers a unique scene of difficulties and valuable open doors. The positive viewpoints highlight the groundbreaking capability of circular economies in reshaping enterprises, encouraging innovation, and moderating environmental effects. Resource proficiency, environmental sustainability, economic flexibility, and social commitment stand as points of support supporting the change to circular models.

Nonetheless, the excursion toward a circular economy isn't without obstacles. Fortright investments, supply chain difficulties, and the requirement for social and regulatory movements present imposing difficulties. Perceiving and tending to these difficulties is critical for understanding the maximum capacity of circular economies.

Effective examples, for example, the circular drives in the Nordic nations and creative plans of action arising globally, act as encouraging signs. They show that beating deterrents is conceivable through a coordinated effort, innovation, and a common obligation to sustainability. Government strategies that boost circular practices, combined with industry-drove drives, play crucial parts in directing this change.

As we stand at the crossing point of economic, environmental, and social difficulties, the standards of closed and circular economies offer a guide towards an additional sustainable and tough future. The integration of positive and negative perspectives stresses the requirement for a reasonable and versatile methodology. By recognizing the intricacies, encouraging coordinated effort, and embracing innovation, social orders can explore the way to circularity, understanding the commitment of a regenerative and comprehensive economic model. The change to a circular economy isn't simply an economic objective; it is an aggregate liability to defend our

planet and guarantee prosperity for a long time into the future. Our next studies will be devoted to these questions.

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