

# Implementation of an Ethical Circular Hub: Framework Proposal

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## ABSTRACT

There are significant regional disparities regarding circular material use rates between Western European countries and other regions in the EU. Hence, there is a severe risk that the circular transition will remain slow and unevenly distributed across EU regions.

Business ethics related to circular change involves some principles and practices that guide the ethical conduct of businesses operating within the circular economy.

The study aims to recommend a framework to guide regional entities to implement an Ethical Circular Hub to identify new solutions and challenges regarding stakeholder collaboration, ethical circular value chains, social equity, fair labor practices, and transparency, suggesting innovative business models.

This framework proposal is based on the literature review and analysis of case studies to identify and promote the best practices in terms of Ethical Circular Hubs implementation.

The outcomes of this study will help improve the regional development of policy instruments in the field of Ethical Circular Hubs, identifying ethical and circular best practices to overcome transition problems, will enable countries' regions to integrate and benchmark successful experiences and policies from other regions into their own regional reality and contribute to a more sustainable, resilient, and inclusive society.

*Keywords: ethics, circular economy, ethical circular hubs, social impact, policies*

## 1. Introduction

Nowadays businesses are facing a lot of challenges related to unethical behavior and the negative consequences of many economic activities on sustainable development and in reaching the Sustainable Development Goals(SDG) of Agenda 2030 defined by the United Nations.

In business, the lack of moral standards and the adherence to rules that prevent unethical behavior and misconduct creates pressure on corporate reliability and profitability. De Cremer (2010) notes that corporate ethical failures have led, for example, to Germany's Siemens agreeing to a \$1.6 billion settlement to address the negative consequences of its bribery operations in emerging markets and oil company Royal Dutch Shell is paying \$150 million for providing false information about its oil reserves. As De Cremer, Tenbrunsel, and van Dijke (2010, p. 1) argue "these observations make it clear that ethical failure has become an important reality for companies, organizations, and society as a whole, and as a result, there is growing concerned about how to deal with and regulate such failure."

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Schminke (2010) already for long time ago has highlighted the necessity of integrating descriptive and prescriptive approaches to business ethics.

Alzola (2011) considers that the best strategy for addressing the specificities of both approaches is to promote a dialog and respect the identity of each other. Regarding the relationship between business and sustainable development Turcan and Ciloci (2021) argue that there is a need not only for a sustainable development of business but for a "clean", "green" comprehensive development, without any negative impact on nature, society, so promoting circular economy could be the key.

There are a lot of Circular Economy definitions in literature but most of them consider it as involving a production and consumption model and a set of principles Sijtsema et al. (2020): sharing economy, reusing, repairing, and recycling existing materials and products. The implementation of a circular economy has certain inferences and signifies a systemic shift towards long-term resilience for companies. Upstream the supply chain the main concern is about the rationalisation of essential raw materials and resource efficiency and downstream the supply chain, that is across the distribution channel, the focus should be on reducing overconsumption based on sharing economy. This new framework is in line with the United Nations' SDG in Agenda 2030 (UN, 2021). Moreover, according to the Ellen McArthur Foundation, to reach a real circular economy it is mandatory to follow a holistic and integrated perspective avoiding by this way greenwashing practices.

In this context, it is urgent to work on business ethics fostering the change from a more linear economic model to a circular one. In an attempt to help businesses become more ethical and circular, this work represents a work-in-progress paper that aims to explore the idea of implementing an Ethical\_Circular Hub as an innovative system with networks of knowledge creation and sharing in these areas. As a meeting point of communities of knowledge and interest, the Ethical\_Circular Hub will fulfill the three major functions that any knowledge hub should have according to Evers and Hornide (2007): to generate knowledge, to transfer knowledge to business stakeholders, and to transmit knowledge to other people through education and training.

This working paper is organized as follows. The first part gives an insight into the circular economy, sustainability, and ethics. The following part presents the methodology used, where we have included and focused on different methodological works. The proposed model is our contribution to the need for creating an ECH4B. The last section ends with the discussion and conclusion.

## **2. Background**

There is an imminent awareness of the need for circularity and sustainability by key players in the global business environment. Ongoing awareness-raising has emerged as a way of finding solutions to environmental problems such as the loss of biodiversity, water, air, and soil pollution, resource depletion and over-use of land, which is increasingly putting the Earth's life support systems at risk (Geissdoerfer, Savaget, Bocken, & Hultink, 2017). Providing information on the circular economy through knowledge creation and application is necessary to work on professionals' skills and organisational processes for sustainable development.

A circular economy is an alternative economic system that encourages reuse, sharing, repairing, refurbishing, remanufacturing, and recycling to create a closed structure with the goal of minimising resource input and reducing waste, pollution, and emissions. Such an economy promotes reduction, reuse and recycling (3R) policies (Geissdoerfer et al, 2017; Mohajan, 2019).

The circular economy has received special attention from policymakers, researchers, and practitioners worldwide as a way of promoting sustainable development goals (Niero & Hauschild, 2017). For example, the European Commission's action plan for circular economy aims at developing a sustainable, low carbon emission, resource-efficient, and competitive European economy (European Commission, 2015). The reason is that the traditional linear production and consumption systems are detrimental to the environmental and societal aspects of sustainability. Hence, the circular economy is regarded as a sustainable approach, which requires a transformation of both production and consumption systems (De los Rios, & Charnley, 2017).

As knowledge is considered an essential asset for growth and development, the emergence of a global knowledge-based economy driven by information and communication technologies and knowledge-intensive services is necessary (Hislop, Bosua, & Helms, 2013). This has created a solid foundation for effective knowledge management in organizations. Knowledge management in the context of the circular economy can be referred to as an integral part of organizational learning and development. An important point of knowledge management is the accessibility of data and/or the provision of essential information to organizations' stakeholders or the transfer of credible information between organizations (Paulin & Suneson, 2015). For example, knowledge sharing on the 3R policies of the circular economy should be adequately communicated across partners belonging to the same industry. Similarly, a range of in-depth information on the composition of materials to gain better insights into social behavior is also needed to promote circularity (De los Rios & Charnley, 2017).

The other strategic theme is business ethics. The distinction between business ethics and ethics is that business ethics is able to remain consistent while including the other. Rather, business ethics as a field includes ethics in business but is not convertible to it. Whether it is appropriate to make moral judgments about economic systems and businesses and to use moral language is, for example, a metaethical question in business ethics. Business ethics as a subject is a methodical approach to business from an ethical perspective (De George, 1989). The approach to ethics in business for a company is to be responsible and to make ethics a goal itself, as ethics must exist behind any "business ethics". It is not appropriate to incorporate ethics in an abstract analytical organization, or in business companies. Ethics declares its basis not in coherence, but in the personal foundation (Aasland, 2004). There is a perspective that exists a connection between the personal ethics of the owner/manager and the attitude toward the ethical problems in the company (Quinn, 1997).

The greater the ethical difference and challenging forces, the bigger the effort required by a company. Observing business ethics as a struggle has several implications for theory and practice (Kaptein, 2017). Ethics is directly related to the business mission and relationships with employees, customers, suppliers, and so on. Moreover, in an ideal situation, both the business mission and the ethical mission would support the other (Robin, 2009). So,

nowadays, ethics and business should walk hand in hand to approach all the challenges that a responsible company must attend.

Sharing knowledge about these topics is essential to be possible convince companies to implement more circular and ethical behaviour. According to this, the proposal of implementing an Ethical\_Circular Hub for Business (ECH4B) is strategic for fostering companies' behaviour changes in the direction of more sustainable development of countries, the planet, people, and profit.

### **3. Methodology**

In this study, an integrative review of the literature was performed by summarizing data from previous studies in order to provide a more comprehensive understanding of the focused topic contributing to theory development and informing practitioners and policymakers (Whittemore and Knafl, 2005). This type of literature review which consider several study designs from diverse empirical sources could make it more difficult to evaluate the works that make part of the sample. According to Russel (2005) to perform an integrative review with different study designs, the quality of studies should be evaluated to examine if those findings were influenced by the methodological quality. In this study, a set of works using different methodological approaches and focused on a range of outcomes was considered. Also, studies with outlier findings were not identified which becomes the developed analyses more reliable since methodological discrepancies do not exist.

### **4. Framework/Model Proposal**

The model of the knowledge hub has already been used by various countries as part of their approaches to building competitive benefits in the knowledge-based economy (Menkhoff, Evers, Chay & Pang, 2011). The definition of a knowledge hub from Evers et al. (2008, 425 ) is “a local innovation system that are nodes in networks of knowledge production and knowledge sharing. They are characterized by high connectedness and high internal and external networking and knowledge sharing capabilities. As meeting points of communities of knowledge and interest, knowledge hub fulfils three major functions: to generate knowledge, to transfer knowledge to sites of application; and to transmit knowledge to other people through education and training”. To successfully build a knowledge hub, a strong collaboration among three actors (universities, business and government) known as Triple Helix collaboration (Ijakraatmadja, Martini, Pritasari, 2011) must be promoted. There is plenty of work on knowledge hubs. Gerke and Evers (2011) show the development of Penang as an increasingly important Asian knowledge hub with a large number of universities, research institutes, and Research and Development (R&D) divisions located closely together to support it where scientific cooperation is highlighted. Brar et al. (2023) summarize the prevailing original research articles on knowledge hubs or platforms and identify the benefits and ways to address challenges when developing a knowledge hub with community participation. From this work, a set of benefits was possible to identify associated with improving dissemination processes, providing more effective community interventions, ensuring informed care, and creating policy assessment

tools. Various challenges associated with funding, and resources are generally consistent for all stakeholders. According to Turin et al. (2021), there is also a need for equal, and respectful cooperation between all stakeholders to achieve success in the production, creation, and mobilization efforts towards knowledge hub implementation. O'Brien et al (2020) have highlighted an important factor that is quite important for developing future knowledge hubs, which is the community's active contribution. This factor could be reached by more community engagement through the inclusion of and collaboration with community members, service providers, and policymakers to include a diverse perspective of actual knowledge users before initiating community interventions.

Performing an integrative review of Knowledge hubs focused on ethical and circular business, no works and examples are found. The same is verified for ethical business hubs. Regarding circular economy hubs, some works can be found. The European Commission (2022) has created Hubs for Circularity (H4C) as a key instrument to advance the research and innovation agenda of European industries towards the Green Deal's objectives. Examples of operational H4C are scattered across Europe, from the more mature ones (Green City Lathi in Finland, Kalundborg Symbiosis in Denmark, Smart Delta Resources in the Netherlands) to earlier-stage projects (AshCycle, Symsites and WaterProof).

H4C is related to building creativity, digital tools, AI, and breakthrough technologies for implementing cost-optimal pathways and new value chains for a net-zero circular economy all together. This initiative aims to improve cross-sectorial industry collaboration and civil society engagement for Europe's green transformation.

Bianchini and Mafefei (2023) focused on urban circular economy and food systems developing a pilot project to create a Circularity Hub in Milan engaging the municipality of Milan, local makerspaces and FabLabs, agri-food enterprises, and other local stakeholders. Adopting eco-city programs, collaborative consumption models, innovative waste management, and zero waste programs suggesting redesign the industrial system, the infrastructure system delivering services, the cultural framework and the social system that characterize the intervention context (Ghisellini et al. 2016).

In the creation of any type of knowledge hub, as the one suggested in this paper (Ethical\_Circular Hub for Business – ECH4B)) there is a set of parties with a specific role to support its functions in the logic of the Triple-Helix (Tjakraatmadja, Martini & Anggoro, 2011): i) universities - Knowledge generation through research, to define body of knowledge about small and medium enterprises/industries; ii) business - Knowledge generation through business experience; iii) government - knowledge generation through the process of regulation establishment. In this line and using the work of Martini et al., (2012) to successfully create an Ethical\_Circular Hub, universities must produce sound research on ethical and circular best practices. Moreover, knowledge sharing should be encouraged among academics via conferences, training, and joint research and its co-creation and transfer to the industry should be a goal to create new ethical and circular business models. Also, businesses must contribute to funding R&D Institutions, invest in technology to produce platforms for sharing and the government must provide supporting regulations providing supporting infrastructures (area, offices, laboratories, housing for researchers, and other research materials), and incentives program to encourage R&D activities in the ethics and circular topics.

To complete our model, we argue that adding the concept of “community” to Triplex Helix Model could make a difference. Community implies “an activity or an object that is joint and worked on together companies feel that they need to work together with the community”( Haski-Leventhal, 2022, p.139).

Following the steps suggested by the Platform Hubs4Circularity in Europe., the following activities are proposed to be developed in order for building an Ethical\_Circular Hub for Business (ECH4B):

- 1 – Collaboration: connecting ECH4B with stakeholders;
- 2 – Engagement: supporting ECH4B by collecting knowledge, tools, and training materials and making them available to stakeholders;
- 3 – Co-creation process: analysing available collaboration models, tools, and technologies to support the construction of the Hub;
- 4 – Co-creation process: defining a set of methodologies, and KPIs for the quantification of ethical and circularity companies’ behaviour;
- 5 – Benchmarking process: providing a SWOT and PESTEL analyses of regions best suited for the first implementation of the ECH4B including scenarios implementation;
- 6 – Benchmarking process and implementation: creating a Roadmap on how to achieve effective implementation of first-of-a-kind pilot advanced ECH4B, supported by a solid blended funding strategy, targeting a significant level of ethical and circularity by 2030;
- 7 – Implementation - fostering business-to-territory relationships in the area in which the ECH4B, or neighbouring, is located (i.e. with authorities, SMEs, associations, educational organisations, civil society, etc.).
- 8 – Evaluation and sharing of best practices

Attending to this exploratory work based on an integrative literature review the following framework is suggested for the implementation of an ECH4B (Figure 1).

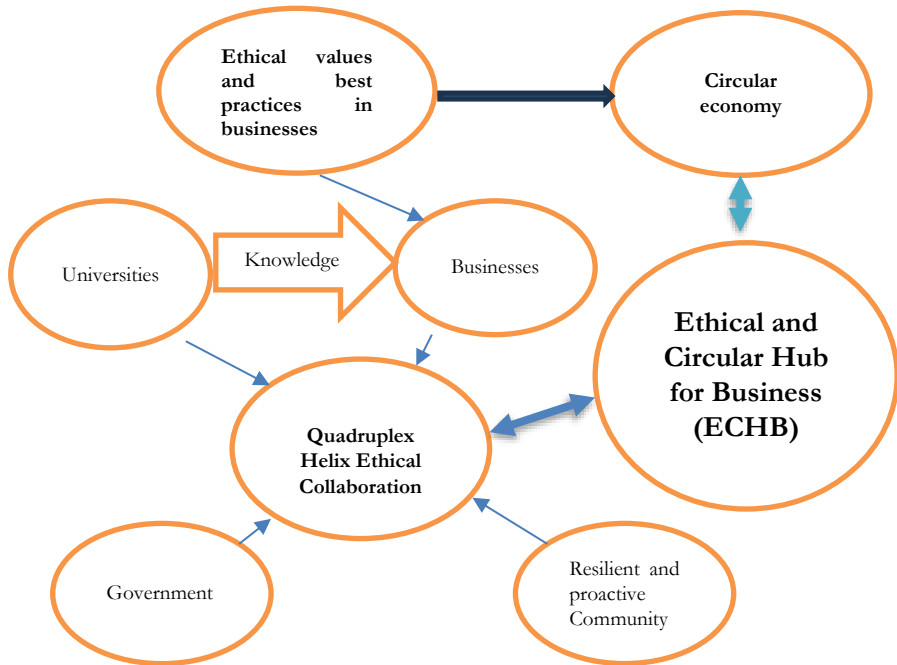


Figure 1 - Ethical and Circular Hub for Business (ECH4B)

The proposed ECH4B would support established companies, and startups in ethical and circular business models, and encourage their inclusion in networks of relevant incubators; and could serve as a mediator, bringing together international and national development cooperation, the local and international private sector, and local intermediaries. Thanks to its regional presence, its know-how, and the establishment of a network and collaboration structure, could also serve as a contact point for regional players and intermediaries such as local chambers of commerce, companies and Industrial Associations, universities, collaborative centers and laboratories, Non-Governmental Organisations and ministries, in a logic of Multi-Helix. Through its activities the Ethical\_Circular Hub would provide the various stakeholders with effective training in ethical and circular practices, suggesting also new opportunities for business and promoting support for ethical and circularity maturity assessment and support for ethical and circular maturity certification (Ethical Circular Maturity Seals). The ECH4B hub will motivate companies to implement in a serious and efficient way ethical and circular behaviour by giving them all the necessary support on how to introduce these practices into companies' culture and disclosing information to the public about companies that are really considered ethical and circular. This will contribute also to discouraging companies from greenwashing.

## 5. Discussion and conclusion

The growing number of publications on the impact and importance of the circular economy for achieving the SDGs shows the increasing relevance of the research field in practice and in academia. According to Gower and Schroeder (2016) in a business context, the implementation of a CE approach could contribute in a positive way to cost savings, job creation, innovation, productivity, and resource efficiency. Transforming the linear business model of production-consumption-disposal into a sustainable process of make-use-reuse-remake-recycle (Mhatre et al., 2021) represents an important driver for the achievement of SDGs (Schroeder et al., 2019; Nesterova, 2022).

Researchers can contribute to community-driven research by engaging more with the perceptions of actual information users, as well as engaging and joining forces with community members and politicians to encompass a varied assessment of actual knowledge users before starting community engagement. Sharing knowledge about these topics is significant in encouraging companies to implement more circular and ethical behaviour. Accordingly, the proposal to establish an ECH4B is of strategic importance in promoting corporate behaviour change towards more sustainable development of countries, planet, people, and profit. We understand as well to develop a new model collaboration, Quadruplex Helix Ethical Collaboration, with the input of the community as a proactive and resilient stakeholder.

Through its activities and engagement, the communities as well as the ECH4B would provide effective training on ethical and circular best practices to various stakeholders, identify new opportunities for businesses, and promote support for ethical and circular maturity assessment and certification.

This work-in-progress reviews in a systematic way the existing literature on the impact of ethics on the circular economy to provide an integrative conceptualization of core issues and areas of impact on the circular economy. It represents an innovative approach to integrating ethics concerns in the context of circular hubs.

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