

# COLLABORATION IN CORPORATE SOCIAL RESPONSIBILITY: TRANSITIONING FROM A QUADRUPLE HELIX TO A HEXA- HELIX PERSPECTIVE

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## Abstract

*Corporate social responsibility (CSR) has evolved from a company-centered approach to a collaborative effort involving various stakeholders, and it is aimed at enhancing community*

welfare. This research examines the collaboration of the quadruple helix, which includes government, industry, academia, and civil society, and seeks to develop an innovation model for managing CSR programs in the Kolaka and South Konawe districts of Southeast Sulawesi Province. The research employed a qualitative method with a descriptive analysis approach. Data were collected through in-depth interviews, focus group discussions (FGDs), and documentation. The results indicated that collaboration among the quadruple actors in managing CSR programs was not optimal due to a lack of coordination and communication. The CSR/TJSLP forum, intended as a platform for stakeholders, struggled to formulate effective programs because of differing perspectives on CSR program management, leading to insufficient motivation to establish long-term communication and cooperation. Therefore, it is essential to innovate a robust form of collaboration through the institutional development of the CSR/TJSLP forum. The proposed institutional innovation model for collaborative CSR program management is the hexa helix model, which includes government, academia, companies, civil society, mass media, and law enforcement. The inclusion of these two additional actors is a crucial strategy for enhancing the impact and effectiveness of CSR programs, as it fosters a diversity of viewpoints and expertise in decision-making related to CSR program management. This approach also helps increase access to resources, including finance, expertise, and networks. This research has long-term implications, both for companies and the community. For companies, strengthening collaboration in managing CSR programs through the hexa helix model will increase social legitimacy (social license to operate), build a positive image of a company, and encourage the creation of sustainable partnerships with stakeholders at the local level. Increased public trust facilitates the smooth operation of companies, reduces the potential for social conflict, and increases investment stability in the operational area. Meanwhile, for the community, the existence of this collaborative model can increase the effectiveness of CSR programs in responding to local needs. The involvement of civil society, mass media, and law enforcement in the planning and monitoring process will increase transparency, accountability, and sustainability of social programs. In the long run, this is expected to encourage community capacity building, reduce social inequality, and strengthen the socioeconomic resilience of communities around industrial areas. Thus, the implementation of this innovative model not only creates synergy between the public and private sectors but also strengthens the foundation of inclusive and participatory sustainable development in Kolaka and South Konawe districts.

**Keywords:** collaboration, CSR, hexa helix, multistakeholder, quadruple helix

## Introduction

Corporate social responsibility (CSR) is an essential part of a company's business strategy. CSR aims to drive profitability while simultaneously promoting a positive impact on society and the environment. The UN Global Compact (2016) describes CSR as a

company's commitment to generating sustainable value over the long term across financial, environmental, social, and ethical dimensions (Butković et al. 2021, 146). Therefore, the effective implementation of CSR programs requires a comprehensive and integrated approach, leveraging collaboration and synergy among various stakeholders to address the inherent complexities in social and environmental challenges. Husted and Sousa-Filho (2016) propose that collaborative governance is the preferred mode of governance for corporate social responsibility practices (Vazquez-Brust et al. 2020, 3).

An effective and innovative approach to enhancing the management of corporate CSR initiatives is the quadruple helix model. As proposed by Etzkowitz and Leydesdorff (2000), this model builds upon the foundation of the triple helix theory, which emphasizes the dynamic interaction between government, academia, and industry within a knowledge-based society. The quadruple helix expands this framework by introducing a fourth element—representing the public, media, cultural communities, civil society, consumers, or end users (Arnkil et al. 2010; Carayannis and Campbell 2009; Pascu and Van Lieshout 2009, as cited by Zotorvie et al. 2024, 326–27).

Although the practice of collaboration has been extensively discussed in the literature, researchers continue to face challenges in explaining collaborative processes and formulating policy recommendations applicable across various contexts. For instance, research by Prentice et al. (2019) explores the use of collaboration tools—such as information, facilities, and staff—as a means to support collaboration between organizations. This includes research conducted within the framework of the quadruple helix model. Most existing studies adopt a macro perspective and overlook micro aspects (McAdam and Debackere 2018). Building on this foundation, this study will explore the quadruple helix model from a micro perspective, focusing on the collaboration among quadruple helix actors.

This is due to the increasing challenges and dynamics of actor relations within the quadruple helix model. The issues at hand include a lack of coordination, communication, commitment, and active participation from each quadruple helix actor. Differences in interests, organizational culture, and perspectives among actors often hinder effective collaboration. Muscio and Vallanti (2014) also highlighted problems in fostering collaboration among quadruple helix actors. They noted that, despite broader involvement and prioritization in the policy agenda, the level of implementation remains disappointing (McAdam et al. 2018, 2). This collaboration faces numerous challenges related to relationship management (McAdam et al. 2018). Factors such as authority issues, trust, interdependence, reciprocity, transparency, commitment, active participation, and communication skills play a crucial role in determining the success of stakeholder collaboration (Bouwen and Taillieu 2004; Graci 2013; Gray 1989; Hall 1999; Huxham and Vangen 2000; Jamal and Stronza 2009; Selin and Batu 1995; Selin et al. 2000; 2012, as cited in Wondirad et al. 2020, 3).

This research aims to describe the collaboration among quadruple helix actors in managing CSR programs and to develop an innovative model for relationships within a collaborative framework. This model serves as an alternative approach to managing sustainable CSR programs. It is anticipated that this innovative collaboration model will provide a

reference for local governments in fostering collaborative relationships in public services and sustainable development.

## 2. Theoretical Background

### 2.1 Collaboration Theory with the Quadruple Helix Approach

Interorganizational collaboration is a process that occurs when two or more legally independent organizations work together to address a specific problem characterized by interdependence. The involved organizations jointly define the problem and then establish common goals that serve the interests of each organization (Schruijer 2020, 2). The underlying idea of intersectoral collaboration, according to Huxham and Vangen (2004) and Quélin et al. (2017), is to gain collaborative advantage by combining partners' resources and expertise and jointly capitalizing on each partner's strengths (Stadtler and Karakulak 2020, 2).

Elston J. M. (2013) describes interorganizational collaboration as a joint effort among stakeholders or organizations working together to reach a unified objective and generate mutual benefits. This form of collaboration entails building a shared structure in which responsibilities, decision-making, and resource allocation are collectively managed, with authority and accountability equally distributed among participants (Aunger et al. 2021, 2). Additionally, Roberts and Bradley (1991) characterize collaboration as an interactive process with a common goal, defined by voluntary membership and joint decision-making (Qvarfordt et al. 2024, 91).

Within the context of collaborative frameworks, the quadruple helix model serves as a key approach. Schütz et al. (2018) describe this model as pertaining to the micro level of a knowledge-based innovation system, emphasizing the interactions and collaborations among actors from four distinct subsystems: academia, industry, government, and society (Hafedh 2022, 26). Carayannis and Grigoroudis (2016) state that the concept of quadruple helix can serve as a blueprint for academic innovation, simultaneously involving four sectors: government, universities, companies, and civil society. The integration of these perspectives aims to create concepts and contexts for designing, implementing, and developing entrepreneurship and innovation ecosystems that promote sustainable and inclusive growth (Sabaruddin et al. 2023, 881).

Arnkil et al. (2010) describe the quadruple helix approach to collaboration as a facilitator of innovation. The stakeholders involved in the quadruple helix include the public sector, businesses, academia, and citizens (Qvarfordt et al. 2024). The relationships among these stakeholders can be described as shown in Figure 1.



**Figure 1.** Stakeholders in the Quadruple Helix (Arnkil et al. 2010, as cited in Qvarfordt et al. 2024)

## 2.2 Corporate Social Responsibility Program Management

In theory, CSR program management refers to the “*triple bottom line*” concept proposed by John Elkington, known as the 3Ps: profit, people, and planet. In this context, the success of CSR is not only measured by the amount of financial contribution but also by the extent to which the program contributes to sustainable development. According to Kleindorfer et al. (2005), CSR practices describe the social dimension of sustainability (Khan et al. 2022, 5).

CSR includes company programs that support the welfare of employees and society. Boso et al. (2017) and Brown et al. (2006) revealed that CSR has become an essential component for companies to demonstrate their performance in reducing environmental impact and contributing to sustainable development. Zheng et al. (2015) explained that CSR reflects a form of cooperative action with stakeholders such as employees, shareholders, suppliers, customers, and society (Adomako and Tran 2022, 1414). In Indonesia, CSR management is regulated by Law No. 40 of 2007, which mandates that companies, particularly in the natural resources sector, implement CSR initiatives. This is reinforced by Government Regulation No. 47/2012, emphasizing the importance of CSR towards surrounding communities and the environment. Companies in natural resources must fulfill their social and environmental responsibilities (PP Nomor 47 Tahun 2012 2012).

## 3. Methodology

This research was conducted in the Kolaka and South Konawe districts, Southeast Sulawesi Province, focusing on quadruple helix actors’ collaboration and the innovation

model of stakeholder collaboration in CSR program management. A case study approach was chosen as the research method to examine this collaboration, as highlighted by Miller et al. (2016), which emphasized the need for more case-based research at the micro level to understand the complexity of quadruple helix activities. Eisenhardt and Graebner (2007) and Siggelkow (2007) also argue that case studies can generate new insights that refine existing theoretical knowledge (Hasche et al. 2020, 527–28).

This research aims to both describe the collaboration among quadruple helix actors and develop an innovative model for actor collaboration in managing CSR programs. This model can serve as a framework for government CSR program management. The research employed is qualitative, aimed at describing empirical data gathered through in-depth interviews and FGDs. Semi-structured interviews were conducted with members of the TSLP forum in each district, representing key stakeholders in the quadruple helix model: government, academia, business, and civil society. These interviews sought to explore the roles, experiences, and perceptions of collaboration among actors in the implementation of CSR programs. Additionally, FGDs were held with 20 informants from each study area, purposively selected for their active involvement in social, environmental, and local development issues related to CSR. The informants included representatives from local government, local mass media, companies managing CSR (specifically mining and banking companies), academics, and community organization representatives.

The role of the informants in this research is to provide an overview of the implementation of CSR programs, the potential and obstacles in applying the quadruple helix collaborative model, the sustainable CSR management innovation model, and the identification of forms of cross-sector collaboration. Informants also contributed to understanding the dynamics of relationships among stakeholders involved in CSR program implementation, including evaluating the effectiveness of the TSLP forum. The information gathered serves as a crucial foundation for formulating strategies to strengthen CSR governance through the quadruple helix approach, considering the social, economic, and institutional characteristics of Kolaka Regency and South Konawe Regency. The data collected were analyzed thematically to identify patterns of interaction between stakeholders and to provide recommendations for enhancing cross-sector synergies in CSR program management.

## 4. Results and Discussion

### 4.1. Quadruple Helix Collaboration in Corporate Social Responsibility Program Management

To improve CSR program management in the regencies of Kolaka and South Konawe, Southeast Sulawesi Province, stakeholders collaborated to form a corporate social and environmental responsibility forum (TSLP) or CSR forum. This forum aims to enhance coordination and synergy in implementing CSR initiatives within these regencies. It includes

government representatives, corporate entities, community organizations, and academic institutions, thereby embodying the quadruple helix framework. The stakeholder forum in Kolaka Regency is officially recognized as the corporate social responsibility forum (TSLP) based on Kolaka Regent Decree No. 188.45/031/2015. In South Konawe District, the forum operates as a CSR forum under Regulation of South Konawe Regent No. 35/2016, which outlines implementation guidelines for corporate social responsibility.

The research findings indicate that communication challenges significantly hindered the development of effective CSR programs within the CSR/TSLP forum. Participants exhibited a lack of commitment to promoting sustainable communication and collaboration. This issue arose from differing perceptions regarding the management of CSR programs, particularly concerning authority over CSR funds—whether it should be held by a company, local government, or the CSR/TSLP forum.

The research findings illustrate that the collaboration among quadruple helix actors in managing CSR programs aligns with the views of Wood and Gray (1991, 140) and occurs primarily in the preconditioning phase. In this phase, actors collaborate due to their motivation and desire for participatory, transparent, and accountable CSR management. Additionally, efforts should be made to synchronize, harmonize, and synergize CSR programs implemented by companies in collaboration with local governments and communities. Collaboration has not yet advanced to the implementation stage of the process and its outcomes. To ensure the sustainability and success of CSR programs, strong commitment and effective communication among actors are essential. This indicates that obstacles remain in building sustainable collaboration, stemming from differing perceptions and interests in managing CSR programs.

Consequently, the government lacks data on the CSR activities conducted by companies. This absence of reporting diminishes the perceived transparency of these companies in their social and environmental program initiatives, as they do not provide written reports to the local government to demonstrate accountability to the community. As a result, the Regional Development Planning Agency (BAPPEDA), which is responsible for assisting regional leaders in the preparation, coordination, and oversight of development planning at the district level while integrating various cross-sector programs in alignment with regional and national development policies, does not receive information pertaining to the CSR activities of these companies.

This situation indicates that the collaborating actors do not have a strong commitment to building long-term partnerships. This lack of commitment is evident in the absence of transparency and open communication between the quadruple helix actors involved in the CSR/TSLP forum, as well as the lack of a working mechanism to support the synchronization of company CSR programs with the regional development priority programs outlined in the Regional Medium-Term Development Plan (RPJMD). The RPJMD is a regional development planning document that outlines a five-year framework, encompassing the vision, mission, policy direction, development strategies, priority programs, and performance indicators to be achieved by the regional head during their term of office. As

a result, collaboration remains limited to formal aspects and does not progress to a deeper implementation stage, preventing the community from fully realizing the potential positive impact of CSR programs.

In addition to commitment, a significant challenge faced by the CSR/TSLP forum pertains to the differing perspectives among stakeholders regarding the management of CSR programs. Research indicates that companies often operate under the principle that, as capital owners, they are responsible for independently managing and formulating CSR initiatives. Conversely, forum members advocate that CSR programs should align with local needs and regional development priorities. These divergent viewpoints can create conflicts in defining the direction and objectives of the programs, thereby hindering effective collaboration.

The regulations established by the Regent of South Konawe and the Regional Regulation of Kolaka Regency clearly stipulate that sustainable CSR planning must incorporate the outcomes of development plan deliberations (Musrembang) at the village, sub-district, and district levels. Musrembang serves as an annual participatory forum that engages local governments, communities, and other stakeholders in formulating development priorities. This process is conducted in stages, progressing from the village to the sub-district, district/city, and provincial levels. The objective is to ensure that CSR programs implemented by companies do not duplicate local government activities.

The study results revealed that corporate social responsibility programs in Kolaka Regency include empowerment-based social and environmental development; partnerships with micro, small, and cooperative enterprises; and direct community programs. Furthermore, the partnership program includes aspects of activities for the following: a) research and needs assessment; b) strengthening community socio-economic institutions; c) training and mentoring in entrepreneurship; d) training in management functions and financial governance; e) training in business development, such as improving product quality and design, packaging, marketing, cooperation networks, and improving company classification; f) improving management capabilities and productivity; and g) encouraging the growth of innovation and creativity. In South Konawe Regency, company CSR programs focus on empowerment of community economy, education, health and sanitation, infrastructure, energy resources, environment, capacity building, and partnerships with governmental, religious, social, and cultural organizations, as well as emergency response.

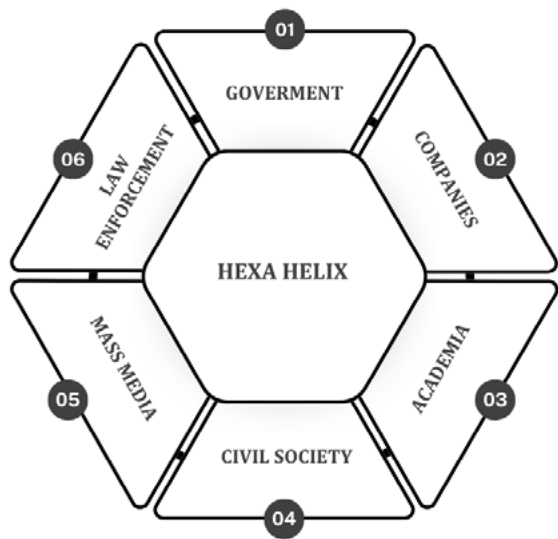
#### 4.2. Ideal Model of Inter-Actor Collaboration in Corporate Social Responsibility Program Management

This section aims to develop an innovation model based on a study of quadruple helix actor collaboration in the implementation of CSR programs. A key finding from the research is that the collaboration among quadruple helix actors in managing CSR programs is less effective than expected. Empirically, the CSR/TSLP forum, which represents the involvement of actors in the quadruple helix model, should expand its scope by incorporating



two additional participants: mass media and law enforcement. This inclusion would enhance the collaborative ecosystem.

With this addition, the relationship between actors forms a six-helix structure that defines the hexa helix model. Mass media plays a dual role in innovation: it not only disseminates information but also shapes public opinion, influencing policy direction and public acceptance of innovation. Additionally, the law enforcement dimension of the hexa helix highlights the importance of ensuring that innovations develop within legal boundaries, protect public interests, and uphold ethical standards. The hexa helix model is depicted below:



**Figure 2.** Hexa Helix Model (processed by the author, 2024)

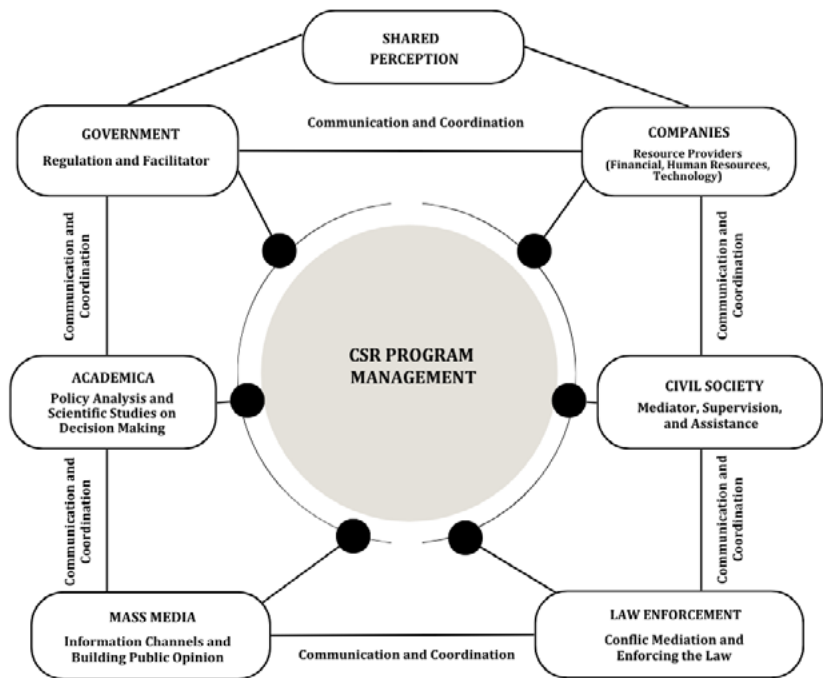
Figure 2 illustrates the relationship among the hexa helix actors—government, companies, academia, civil society, mass media, and law enforcement—showing an integrated pattern of collaboration aimed at achieving sustainable development goals. Each actor plays a strategic role that complements the others, fostering innovative solutions to public problems.

The roles of each actor are presented below:

1. **Government:** The government acts as both a regulator and a facilitator. As a regulator, it creates policies, regulations, and standards that support collaborative programs. As a facilitator, it serves as a liaison between companies, communities, and other institutions to ensure that these programs benefit the public interest. Additionally, the government can foster multisectoral cooperation and help overcome obstacles to collaboration.

2. **Companies:** Companies are responsible for allocating resources—financial, human, and technological—to support collaborative programs that have social and environmental impacts and to implement sustainable business practices.
3. **Academia:** The institution of higher education provides support grounded in research, theory, and scientific studies to inform decision-making related to development programs and innovations in sustainable development.
4. **Civil Society:** Civil society encompasses communities, non-governmental organizations (NGOs), and other public interest groups. Its role includes acting as watchdogs, mediators, and promoters of participation, ensuring that collaboratively produced innovations align with social values and positively impact society.
5. **Mass Media:** The mass media plays a crucial role in disseminating information, raising public awareness, and shaping opinions that support collaboration among actors. It also acts as a watchdog by evaluating the success or failure of collaboration programs, ensuring that organizations remain transparent and accountable in their activities.
6. **Law Enforcement:** Law enforcement ensures compliance with existing laws, maintains security, mediates conflicts, and resolves violations. By promoting justice and order, law enforcement supports an environment conducive to innovation and collaboration, allowing *all actors* to work together effectively without legal barriers.

Each actor must follow a structured framework in executing their roles. This framework is designed to facilitate collaborative relationships among actors, ensuring alignment with the agreed-upon goals and objectives. It serves as a guideline to clarify each actor's responsibilities, authorities, and limits of authority. Overall, the relationship and framework of the hexa helix actors can be described as shown in Figure 3 below.



**Figure 3.** Hexa Helix Relationship Model and Framework for CSR Program Implementation (processed by the author, 2024)

Figure 3 illustrates that the relationship between actors in CSR program management is characterized by communication and coordination as the main factors in the collaboration process. This relationship includes government actors, companies, academics, civil society organizations, mass media, and law enforcement, which together represent the hexa helix model. The model also highlights that a shared perception serves as the binding element among hexa helix actors in formulating, determining, and implementing CSR programs. This shared perception in CSR program management ensures that all involved actors have aligned views on the objectives, strategies, and implementation of CSR activities.

The evolution from the quadruple helix to the hexa helix addresses the increasing complexity of challenges in innovation, particularly those related to sustainable development, socioeconomic advancement, and technological transformation. The original quadruple helix model consisted of four main entities—government, academia, industry, and society—but has now evolved into a more collaborative framework within the innovation ecosystem. Given the dynamic environmental landscape, the involvement of additional stakeholders is essential for creating comprehensive and inclusive solutions.

The research findings indicate that the implementation of CSR programs in the Kola-ka and South Konawe regencies does not fully demonstrate effective collaboration among

quadruple helix actors—government, companies, academics, and civil society. The primary issue is the lack of coordination between sectors and weak ongoing communication. The CSR/TSLP forum, intended as a joint platform for formulating and evaluating programs, has not been able to function optimally. This is attributed to differing views and interests among stakeholders, as well as a lack of motivation to establish long-term commitment and cooperation.

The findings of this study provide the foundation for developing a more comprehensive collaboration model known as the hexa helix model. This model encompasses six key elements: government, academia, companies, civil society, mass media, and law enforcement. It represents a novel approach proposed in the research to address communication and coordination barriers across these sectors, while enhancing transparency and accountability in the management of CSR programs. Additionally, it aims to improve the sustainability and social impact of CSR initiatives at the local level. Future research will focus on the contextual application of the hexa helix model in Indonesia, including strategies for institutional strengthening and mechanisms for synergy among actors relevant to local social, economic, and institutional conditions.

## 5. Conclusions

1. Collaboration among government, academia, companies, and civil society in managing CSR programs in Kolaka and South Konawe districts, Southeast Sulawesi Province, remains suboptimal. Members of the CSR/TSLP forum encounter challenges in aligning their vision due to differing perspectives on CSR management. This discord arises from insufficient coordination and communication among stakeholders, leading each company to plan, implement, and evaluate CSR programs independently, without engaging the CSR/TSLP forum. This situation illustrates that the effectiveness of quadruple helix collaboration is affected by both structural factors and social dynamics, culture, and leadership styles.
2. To enhance the management of sustainable CSR programs, the quadruple helix model can be expanded into a hexa helix model, facilitating more structured and strategic collaboration. This innovative model optimizes the roles of each stakeholder—government, companies, academia, civil society, mass media, and law enforcement—allowing them to contribute based on their respective expertise and resources. Furthermore, this model is expected to improve communication and coordination between sectors, strengthen transparency and accountability in CSR management, and promote the sustainability of programs that positively impact local communities.
3. This research opens opportunities for further investigation into the application of the hexa helix model in broader contexts, both regionally and globally. Future studies should focus on how this model can be adapted and implemented in specific

contexts, as well as evaluating its impact on the effectiveness of CSR programs and the improvement of community welfare. Additionally, further development of monitoring mechanisms and institutional strengthening in CSR implementation is an area that warrants exploration in future research.

## References

1. Adomako, Samuel, and Mai Dong Tran. 2022. "Stakeholder Management, CSR Commitment, Corporate Social Performance: The Moderating Role of Uncertainty in CSR Regulation." *Corporate Social Responsibility and Environmental Management* 29 (5): 1414–23. <https://doi.org/10.1002/csr.2278>.
2. Aunger, Justin Avery, Ross Millar, Joanne Greenhalgh, Russell Mannion, Anne-marie Rafferty, and Hugh Mcleod. 2021. "Why Do Some Inter-Organisational Collaborations in Healthcare Work When Others Do Not ? A Realist Review," 1–22.
3. Butković, Lana Lovrenčić, Dina Tomšić, and Simona Kaselj. 2021. "Collaborative Strategic View in Corporate Social Responsibility - Construction Industry Case." *Business Systems Research* 12 (1): 144–63. <https://doi.org/10.2478/bsrj-2021-0010>.
4. Hafedh, Hooreya Ali. 2022. "The Quadruple Helix as an Approach to Strengthen Bahrain 's Innovation Agenda : The Financial Services Sector Ecosystem," no. March.
5. Hasche, Nina, Linda Höglund, and Gabriel Linton. 2020. "Quadruple Helix as a Network of Relationships: Creating Value within a Swedish Regional Innovation System." *Journal of Small Business and Entrepreneurship* 32 (6): 523–44. <https://doi.org/10.1080/08276331.2019.1643134>.
6. Khan, Mustafa Rehman, Haseeb ur Rehman Khan, and Arsalan Mujahid Ghouri. 2022. "Corporate Social Responsibility, Sustainability Governance and Sustainable Performance: A Preliminary Insight." *Asian Academy of Management Journal* 27 (1): 1–28. <https://doi.org/10.21315/aamj2022.27.1.1>.
7. McAdam, Maura, Kristel Miller, and Rodney McAdam. 2018. "Understanding Quadruple Helix Relationships of University Technology Commercialisation: A Micro-Level Approach." *Studies in Higher Education* 43 (6): 1058–73. <https://doi.org/10.1080/03075079.2016.1212328>.
8. PP Nomor 47 Tahun 2012. 2012. "Peraturan Pemerintah Nomor 47 Tahun 2012 Tentang Tanggungjawab Sosial Dan Perseroan Terbatas."
9. Qvarfordt, Maria, Stefan Lagrosen, and Lina Nilsson. 2024. "Quadruple Helix Collaboration Relationship Approach EHealth : A Business Quadruple Helix Collaboration for EHealth : A Business Relationship Approach Maria Qvarfordt \* Stefan Lagrosen Lina Nilsson," no. April. <https://doi.org/10.1504/IJHTM.2024.10065055>.
10. Sabaruddin, Abdul, Maulid, and Laode Muh. Elwan. 2023. "Review of Quadruple Helix Actors in the Management of Corporate Social Responsibility ( CSR ) Programs." *Migration Letters* 20 (10): 878–94.
11. Schruijer, Sandra. 2020. "The Dynamics of Interorganizational Collaborative Relationships: Introduction." *Administrative Sciences* 10 (3). <https://doi.org/10.3390/admsci10030053>.
12. Stadler, Lea, and Ozgu Karakular. 2020. "Broker Organizations to Facilitate Cross-Sector

- Collaboration: At the Crossroad of Strengthening and Weakening Effects” 00:1–21. <https://doi.org/10.1111/puar.13174>.
13. Stephen, Justice, Tetteh Zotorvie, and Christina Cornelia Shuttleworth. 2024. “A Quadruple Helix Intervention for Accounting Education in Ghana” 23 (3): 322–47.
  14. Vazquez-Brust, Diego, Roberta Souza Piao, Mary Fernanda de Sousa de Melo, Rodrigo Trotta Yaryd, and Marly M. Carvalho. 2020. “The Governance of Collaboration for Sustainable Development: Exploring the ‘Black Box.’” *Journal of Cleaner Production* 256:120260. <https://doi.org/10.1016/j.jclepro.2020.120260>.
  15. Wondirad, Amare, Denis Tolkach, and Brian King. 2020. “Stakeholder Collaboration as a Major Factor for Sustainable Ecotourism Development in Developing Countries.” *Tourism Management* 78 (November 2018): 104024. <https://doi.org/10.1016/j.tourman.2019.104024>.
  16. Wood, Donna J., and Barbara Gray. 1991. “Toward a Comprehensive Theory of Collaboration.” *Journal Of Applied Behavioral Science* 27 (2): 139–62.

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